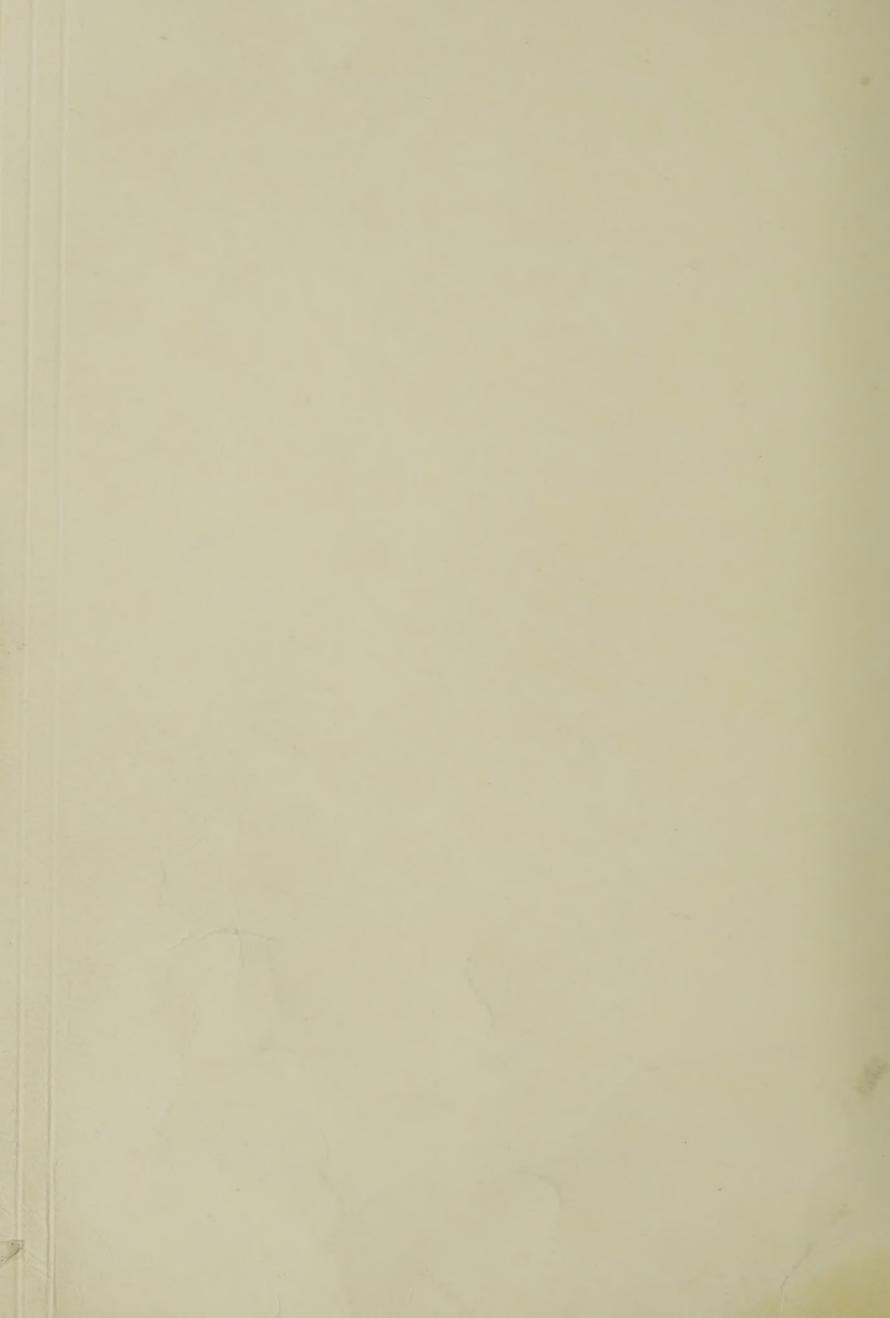
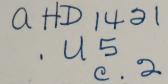
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



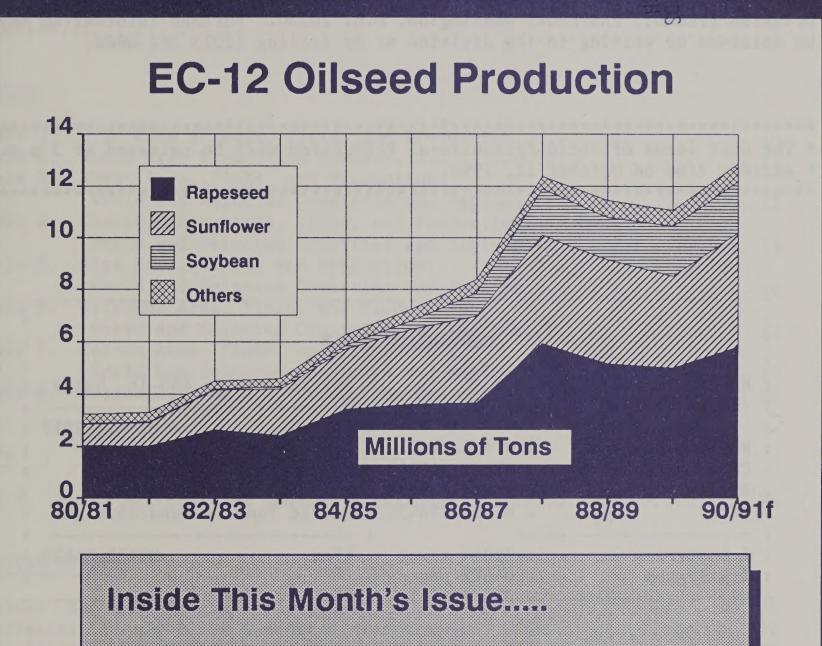




United States
Department of
Agriculture

Foreign Agricultural Service Circular Series WAP 9-90 September 1990

World Agricultural Production



EC-12 Oilseed Production USSR/Kazakhstan Wheat Production Asian Tropical Timber Production This report draws on information from USDA's global network of agricultural attaches and counselors, official statistics of foreign governments, other foreign source materials, and results of office analysis. Estimates of U.S. acreage, yield, and production are from USDA's Agricultural Statistics Board, except where noted. All numbers in this report are based on unrounded data and detail may not add to totals because of rounding. This report reflects official USDA estimates released in World Agricultural Supply and Demand Estimates (WASDE-246), September 12, 1990.

This report was prepared by the Production Estimates and Crop Assessment Division (PECAD), FAS/USDA, Washington, D.C. 20250. Further information may be obtained by writing to the division or by calling (202) 382-8888.

CONVERSION TABLE

Metric Tons to Bushels

Cotton

Metric Tons to 480-lb. Bales

Metric Tons

Metric T

TABLE OF CONTENTS

SUBJECT	PAGE
PRODUCTION HIGHLIGHTS FOR 1990/91	
Wheat Coarse Grains Rice Oilseeds Cotton	· · · · · · · · · · · · · · · · · · ·
TABLES	
Table 1. U.S. Crop Acreage, Yield, and Production Summary Table 3. Wheat Area, Yield, and Production:	
World and Selected Countries and Re Table 4. Coarse Grains Area, Yield, and Prode	
World and Selected Countries and Ro Table 5. Rice Area, Yield, and Production:	egions
World and Selected Countries and Ro Table 6. Oilseeds Area, Yield, and Production	n:
World and Selected Countries and Ro Table 7. Cotton Area, Yield, and Production:	
World and Selected Countries and Re Table 8. Reliability of July Production Projection	
MAPS	
Map 1. World Agricultural Weather Highlights	
WEATHER BRIEFS	
Mexico: Abundant Rainfall Continues Australia: Timely Rains Benefit Winter Grains West Africa: Rains Slow to Migrate Northward	s 22

PRODUCTION BRIEFS

Brazil: 1990/91 Wheat Crop Progress	23 24 24 24 24
FEATURE COMMODITY ARTICLES World Poultry Meat Production Continues to Grow in 1990 Canadian Crop Production and Field Trip Report	34
FEATURE TABLES	
Table 9. Total Poultry Meat Production in Selected Countries Table 10. Broiler Meat Production in Selected Countries Table 11. Turkey Meat Production in Selected Countries Table 12. Egg Production in Selected Countries Table 13. Canadian Crop Production	31 32 33

PRODUCTION HIGHLIGHTS FOR 1990/91

WHEAT: World production for 1990/91 is estimated at a record 586.9 million metric tons, up 3.1 million or 1 percent from last month and up 9 percent from last year's harvest. Country highlights are as follows:

o United States

Production is estimated at 75.0 million metric tons, up 1.4 million or 2 percent from last month and up 35 percent from last year. The increase is due to higher estimated spring wheat yield.

o Other N. Africa

Production is estimated at 5.5 million tons, up 0.6 million or 12 percent from last month and 3 percent from last year. Official Tunisian Ministry of Agriculture post-harvest information indicates higher harvested area, and late season rains are estimated to have boosted yields.

o Australia

Production is estimated at 15.0 million tons, up 0.5 million or 3 percent from last month and up 6 percent from last year's crop. Wheat area and yields are estimated slightly higher, with favorable moisture conditions continuing in most growing regions.

o China

Production is estimated at 96.0 million tons, up 0.5 million or less than 1 percent from last month and up 6 percent from last year. China harvested a record winter wheat crop, and a larger-than-normal spring wheat crop is estimated due to favorable summer weather in the Northeast.

o EC-12

Production is estimated at 80.8 million tons, up 0.5 million or 1 percent from last month and up 3 percent from last year's harvest. The increase reflects a record yield for the Community as a whole. Estimated increases in France and Denmark offset reductions in the United Kingdom, West Germany, and Belgium.

o East Europe

Production is estimated at 44.3 million tons, up 0.4 million tons or 1 percent from last month and up marginally from last year. Production is estimated higher in Bulgaria (+0.6 million tons) and Poland (+0.4 million tons) which offset estimated decreases of 0.1 million tons in Albania, 0.2 million tons in Hungary, and 0.3 million tons in Romania.

o Non-EC W. Burope

Production is estimated at 4.8 million tons, up 0.3 million or 7 percent from last month and up 10 percent from last year. Expanded area based on individual government surveys and favorable weather through out the growing season contributed to the estimated production increases in Finland, Norway, and Sweden.

o Brazil

Production is estimated at 4.5 million tons, down 0.6 million or 12 percent from last month and down 19 percent from last year. Frost, sleet, and strong winds damaged the crop in the main growing areas, causing estimated reductions in both yield and area.

o Canada

Production is estimated at 28.6 million tons, down 0.5 million tons or 2 percent from last month, but up 17 percent from the revised estimate of last year's crop. The change is based on a survey of producers taken by Statistics Canada.

COARSE GRAINS: World production for 1990/91 is estimated at 821.6 million tons, up 4.4 million or less than 1 percent from last month and up 3 percent from last year. Country highlights are as follows:

o United States

Production is estimated at 235.3 million tons, up 7.6 million or 3 percent from last month and up 6 percent from last year. Higher yields are estimated for corn, barley, and sorghum.

o East Europe

Production is estimated at 62.3 million tons, down 3.9 million tons or 6 percent from last month and down 8 percent from last year's crop. The estimated decrease is due primarily to reductions in corn output in Bulgaria, Czechoslovakia, Hungary, Romania, and Yugoslavia due to drought.

o Tanzania

Production is estimated at 3.0 million tons, down 1.0 million or 25 percent from last month and down 25 percent from last year. The reduction reflects a sharp decline in estimated area for corn, sorghum, and millet.

o EC-12

Production is estimated at 77.4 million tons, down 0.7 million or 1 percent from last month and down 5 percent from last year. The decrease reflects primarily a lower estimate for corn production in France. Barley output also is estimated down in the United Kingdom and Spain due to dry weather, but was partially offset by barley increases in Denmark and West Germany.

Production is estimated at 1.2 million tons. down 0.3 million or 20 percent from last month and down 29 percent from last year's harvest. The lower corn estimate is due to unfavorable weather at the silk/tassel growth stage.

Non-EC V. Europe Production is estimated at 12.6 million tons, up 0.8 million or 7 percent from last month and up 2 percent from last year. Favorable weather and the release of individual government crop surveys are reflected in this month's increase in Finland, Norway, Sweden, and Switzerland.

Brazil 0

Production is forecast at 25.4 million tons, up 0.5 million or 2 percent from last month and up 9 percent from last year. The estimated corn increase is due to improved yield prospects, brought about by reductions in input costs. The Government of Brazil recently announced trade policy measures designed to liberalize imports of agricultural inputs and ease high costs of production.

Canada

Production is estimated at 25.4 million tons, up 0.5 million or 2 percent from last month and up 8 percent from last year. Increases in estimated corn and rye were partially offset by a reduction in oats and barley production. The figures are based on a survey of producers taken by Statistics Canada.

Production is forecast at 1.9 million tons, up 0.4 million or 26 percent from last month and up 19 percent from last year. Favorable weather in the western and central growing regions has benefited both millet and sorghum; area and yields are estimated higher.

Production is estimated at 0.5 million tons, up 0.3 million or 127 percent from last month and up 138 percent from last year. Barley area is estimated higher and late season rains relieved dry conditions, thereby improving yields.

RICE (MILLED-BASIS):

World production for 1990/91 is estimated at at a record 342.0 million tons, up 1.0 million or less than 1 percent from last month and up less than 1 percent from last year's crop. Foreign production in 1990/91 is projected at a record 337.1 million tons. U.S. output is projected at 5.0 million tons, up marginally from last month but down 1 percent from last season. Country highlights are as follows:

o Bangladesh

Production is estimated at 17.5 million tons, up 0.5 million or 3 percent from last month, but down 3 percent from last year's record harvest. Yields are estimated slightly higher owing to favorable growing conditions for the main Aman rice crop.

o Burma

Production is estimated at a record 8.4 million tons, up 0.3 million or 4 percent from last month and up 4 percent from last year. Unusually good rains are estimated to have boosted yields.

OILSBEDS: Total world oilseeds production during 1990/91 is forecast at a record 217.3 million tons, down 1.9 million from last month, but up over 6.0 million or 3 percent above the 1989/90 crop. Foreign production during 1990/91 is projected to be a record 159.3 million tons, down 1.6 million from last month, but up 7.3 million or 5 percent from last year. U.S. production is projected at 57.9 million tons, down 0.4 million or 1 percent from 1989/90.

- * Soybeans: World production for 1990/91 is forecast at a record 105.2 million tons, down 1.5 million or over 1 percent from last month and down 0.9 million or 1 percent from last year. Total foreign soybean output is forecast at 55.3 million tons, down 1.5 million from last month but up 1.6 million or 3 percent from 1989/90. Country highlights are as follows:
 - o United States

Production is estimated at 49.9 million tons, down marginally from last month and down 5 percent from last year.

o Brazil

Production is forecast at 19.0 million tons, down 1.5 million or 7 percent from last month and down 2 percent from last year. Yields and area are expected to decline as farmers respond to the recently announced credit package and agricultural policy statement. The government has placed emphasis on production of domestic use crops at the expense of export crops, such as soybeans. The most serious impact is expected to occur in the remote center-west growing region.

- * Cottonseed: World production for 1990/91 is forecast at 33.4 million tons, up 0.2 million or 1 percent from last month and up 2.7 million or 9 percent from last year. Total foreign production is estimated a 28.2 million tons, up 0.2 million or 1 percent from last month and up 1.8 million or 7 percent above last year. Country highlights are as follows:
 - Production is estimated at 7.6 million tons, down 0.2 million or 3 percent from last month, but up 17 percent from last year. Unfavorable weather last month led to a reduction in the cotton

production estimate.

- Production is estimated at 4.4 million tons, up
 0.3 million or 6 percent from last month, but
 down 3 percent from last year's record crop.
 Favorable moisture conditions in most cotton
 growing areas have raised estimated cotton
 yields.
- Production is estimated at 4.8 million tons, up

 0.2 million from last month and up 0.1 million or

 2 percent from last year. Cotton yields are

 expected to respond favorably to much improved

 weather throughout the major growing areas.
- * Peanuts: World production for 1990/91 is pegged at 21.6 million tons, down 0.3 million from last month, reducing expected output to last year's level. Total foreign production is estimated at 20.0 million tons, down slightly from last month but up 0.2 million or 1 percent from last year. Country highlights are as follows:
 - Production is estimated at 1.6 million tons, down 0.3 million or 15 percent from last month and down 11 percent from last year. While raising harvested area, the National Agricultural Statistics Service lowered its yield estimates due to unfavorable growing conditions.
- * Sunflowerseed: World production for 1990/91 is pegged at 22.9 million tons, down 0.3 million or 1 percent from last month, but up 1.2 million or 6 percent from last year. Total foreign production was lowered this month to 21.8 million tons, down 0.3 million or 1 percent. Country highlights are as follows:
 - Production is estimated at 2.2 million tons, down 150,000 tons or 6 percent from last month's estimate and down 0.2 million or 9 percent below the 1989/90 crop. The estimated decrease is due primarily to reductions in output in Bulgaria and Hungary because of dry weather.

o Turkey

Production is estimated at 1.0 million tons, down 150,000 tons or 13 percent from last month's estimate and down 0.2 million from 1989/90. The reduced estimate is due to dry conditions.

* Rapeseed: World production for 1990/91 is estimated to be a record 23.7 million tons, down marginally from last month, but up 2.1 million or nearly 10 percent from last year. Country highlights are as follows:

o Canada

Production is estimated at 3.3 million tons, down 0.1 million or 3 percent from last month, but up 7 percent from last year. The downward adjustment reflects a slightly lower yield. The figure is based on a survey of producers taken by Statistics Canada.

o EC-12

Production is estimated at 5.8 million tons, up 0.1 million or 2 percent from last month and up 18 percent from last year. The upward adjustment reflects an increase in area for France.

- * Flaxseed: World production for 1990/91 is forecast at 2.3 million tons, up marginally from last month and up nearly 0.4 million or 20 percent over last year. While production by the United States is small, this year's output is expected to increase by 147 percent over last year, to 84,000 tons. Total foreign production is pegged at 2.2 million tons, up 0.3 million or 18 percent from last year. The record world crop of 3.0 million tons has not been seriously challenged since 1977/78. There were no significant changes this month.
- * <u>Copra:</u> World production for 1990/91 is forecast at 4.9 million tons, unchanged from last month but up 0.3 million or 6 percent over last year. Copra production has ranged between 4.3 4.8 million tons for many years, the record being 5.3 million in 1985/86. There are no changes in production estimates from last month.
- * Palm Kernels: World production for 1990/91 is forecast at a record 3.3 million tons, up 3 percent from last year. There is no change in production estimates from last month.
- * Palm Oil: World production for 1990/91 is forecast at a record 11.2 million tons, up 0.1 million from last month and up 0.5 million or nearly 5 percent from last year. The upward trend continues as new trees come into production. Country highlights are as follows:

o Malaysia

Production is estimated at 6.4 million tons, up 0.1 million or 2 percent from last month and up 14 percent from last year. The revision is due to an increase in area and improved production of newer bearing trees.

COTTON: World cotton production in 1990/91 is estimated at 86.9 million bales, up 0.3 million bales from last month and up 7 million bales or 9 percent from last year. Foreign production is estimated at 72.1 million bales, up 0.4 million from last month and 7 percent above the 1989/90 estimate. Country highlights are as follows:

o United States

Production is estimated at 14.7 million bales, down 0.1 million or 1 percent from last month, but up 2.5 million bales or 21 percent from last year. The production drop from last month is due to slightly lower anticipated yields stemming from unfavorable weather in the Southeast and Delta States.

o Australia

Production is forecast at a record 1.6 million bales, up 0.1 million or 7 percent from last month and 18 percent above last year. Higher yields are anticipated owing to increased irrigated area. Cotton planting should commence in October.

o China

Production is estimated at 20.5 million bales, down 0.5 million or 2 percent from last month but up 18 percent from last year. A series of late-summer typhoons and tropical storms struck the coast of China north of Shanghai, an important cotton production area, probably causing some crop losses.

o India

Production is estimated at 10.0 million bales, up 0.6 million or 6 percent from last month, but down 3 percent from last year's record crop. Cotton yields are forecast higher owing to favorable monsoon rainfall in most growing areas.

o Sudan

Production is estimated at 450 thousand bales, down 0.2 million or 30 percent from last month and 26 percent from last year. The decrease is due to severe area reductions. Problems with ginning last year's crop led to large scale abandonment of unharvested cotton. In addition, cotton has received increased competition from grains.

o USSR

Production is estimated at 12.0 million bales, up 0.5 million or 4 percent from last month, but down 2 percent from last year's crop. Cotton yields are estimated higher owing to recent favorable weather in most growing areas.

U.S. Crop Acreage, Yield, and Production 1/

	PLA	PLANTED AREA	EA	HAR	HARVESTED AREA	REA		YIELD				PRODUCTION	NOIL	
COMMODITY		Prel.	Proj.		Prel.	Proj.		Prel.	1990/91 Proj.	1 Proj.		Prel.	1990/91 Proj.	1 Proj.
	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91	1988/89	1989/90	Aug.	Sept.	1988/89	1989/90	Aug.	Sept.
	Mi	Million Acres		Mil	Million Acres-	!	- B	Bushels per Acre-	Acre		2	Million Bushels-	hels	
All Wheat	65.5	76.6	77.3	53.2	62.1	6.69	34.1	32.8	38.7	39.4	1,812	2,036	2,706	2,755
Winter	48.8	55.1	57.0	39.8	41.5	50.1	39.5	35.1	41.0	41.0	1,562	1,454	2,054	2,054
Other ,	16.7	21.5	20.3	13.4	20.7	19.8	18.7	28.1	31.5	35.4	250	585	652	701
Rye	2.4	2.0	1.7	9.0	0.5	0.4	24.7	29.5			15	4	13	13
Soybeans	58.8	60.7	57.7	57.4	59.4	56.6	27.0	32.4	32.5	32.4	1,549	1,927	1,836	1,835
Corn	67.7	72.3	74.5	58.3	64.8	66.7	84.6	116.2	117.7	121.7	4,929	7,527	7,850	8,118
Sorghum	10.3	12.6	10.7	9.0	11.2	9.3	63.8	55.4	59.1	61.8	222	618	547	572
Barley	8.6	9.5	8.3	9.7	8.3	7.7	38.0	48.6	52.0	52.9	290	403	403	409
Oats	13.9	12.1	10.4	5.5	6.9	6.2	39.3	54.4	29.0	29.0	218	374	365	365
							PC	Pounds per Acre	Acre)) }	-Million CWT	WT	
Rice	2.9	2.7	2.9	2.9	2.7	2.8	5,514	5,749	5,611	5,641	159.9	154.5	158.1	159.0
•											W	Million 480-Pound-	Pound	!
All Cotton	12.5	10.6	12.3	12.0	9.5	11.5	619	614	622	616	15.4	12.2	14.9	14.7

1/ Estimates from USDA Agricultural Statistics Board for 1988/89, 1989/90, and for 1990/91 planted and harvested area. 1990/91 September production and yield estimates, except for rye, are also from USDA Agricultural Statistics Board. 1990/91 rye estimates are from USDA Interagency Commodity Estimates Committees.

Production Estimates and Crop Assessment Division, FAS, USDA

September 1990

World Crop Production Summary

Crowling				North	North America			Еигоре				Asia	.89			South	cq	Sele	Selected Other	her	. -
SSG 451.4 483 160 3.2 74.7 3.9 44.8 864.4 85.4 46.2 0.0 12.7 0.0 84.4 5.8 14.1 3.5 15.0	Commodity	World	Total Foreign	United States	Canada	Mexico	EC-12	10000000	Eastern	USSR		India				Argen- tina	Brazil	Aus- tralia		Turkey	Other
SSS											Suc										
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	5	500.7	451.4	49.3	16.0	3.2	74.7	3.9	44.8	84.4	85.4 90.8	46.2	0.0	12.7	0.0	8.4	8. G.	14.1	3.5	15.0	17.7
1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50		583.7	510.1	73.6	29.0	3.5	80.3	4.4.5	43.9	104.0	95.5	54.0	0.0	14.6	0.0	± ± c:	£.5.	14.5	2.5	14.0	16.5
String SSB-5 SZF7 SEG ISO T7.4 ISO GR3 I130 GR4 SZ-3 SG SZ-9 GR3 GR3 SZ-9 SG SG SG SG SG SG SG S	Coarse Grains 1988/89 1989/90 prel.	730.5	580.8	149.7	19.7	13.8	88.1	11.4	61.3	97.5	94.2	31.7	5.2	2.2	4.4	7.3	26.7	6.9	13.0	10.0	87.5 80.3
1350.2 325.0 5.2 0.0 0.3 1.3 0.0 0.2 1.9 118,4 70.7 27.5 3.2 13.9 0.3 7.5 0.6 0.0 0.2 341.2 335.8 5.1 0.0 0.4 1.3 0.0 0.2 1.7 126.1 70.5 28.8 3.5 13.9 0.3 6.7 0.6 0.0 0.2 341.2 335.8 5.1 0.0 0.4 1.3 0.0 0.2 1.7 126.1 70.5 28.8 3.5 13.9 0.3 6.7 0.6 0.0 0.2 156.1 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5		817.2	589.5 586.3	227.7	25.0	15.0	78.2	11.8	66.3 62.3	113.0	96.4	32.3	0.0.0	2.7	4.4 6.6	9.5	24.9	6.6	9.3 9.3	80 80 Ri Ri	80.9
341.2 336.2 5.0 0.0 0.3 1.5 0.0 0.2 1.7 126.0 70.5 28.8 3.5 13.9 0.3 6.7 0.6 0.0 0.2 1.561.4 1.357.2 204.2 35.7 17.2 164.1 15.2 106.3 18.8 288.0 148.6 32.7 18.2 18.4 16.0 40.0 21.3 16.6 25.2 2.5 1.561.4 1.357.2 204.2 23.7 17.2 164.1 15.2 106.3 183.8 289.0 148.6 32.7 18.2 18.4 16.0 40.0 21.3 16.6 25.2 2.5 1.742.1 1.455.8 306.3 54.0 18.8 150.7 17.4 106.8 218.7 318.4 156.8 33.8 20.4 17.9 18.2 21.3 36.5 21.7 11.8 22.7 11.8 1.750.6 1.435.3 315.3 54.0 18.8 150.7 17.4 106.8 218.7 318.4 156.8 33.8 20.8 18.2 21.3 36.5 22.2 11.8 22.7 11.8 2.02.7 152.4 50.3 58.9 1.0 11.5 0.6 5.1 12.7 318.4 156.8 33.8 20.8 18.2 21.3 36.5 22.2 11.8 22.7 11.8 2.02.7 152.4 50.3 5.8 1.0 11.5 0.6 5.1 12.7 31.4 28.5 18.6 2.0 3.3 0.8 15.9 20.7 2.4 0.9 2.3 2.13.2 160.9 58.3 5.5 1.0 12.2 13.4 28.5 18.2 21.1 3.4 0.9 16.4 22.0 0.9 1.0 2.2 3.4 1.5 1.5 0.0 0.1 1.2 1.7 1.7 0.0 0.0 1.5 0.0 0.1 1.2 1.7 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Rice (Milled) 1988/89 1989/90	330.2	325.0	5.2	0.0	0.3	<u></u>	0.0	0.2	1.9	118.4	70.7	27.5	8 8 8 8	13.9	0.3	7.5	0.6	0.0	0.0	22.9
1,551.4 1,357.2 204.2 35.7 17.2 164.1 15.2 106.3 183.8 288.0 148.6 32.7 18.2 18.4 16.0 40.0 21.3 16.6 25.2 15.1 1,435.8 306.3 28.4 18.5 161.6 16.7 112.3 198.8 311.5 155.2 33.9 20.4 17.9 18.5 34.6 21.7 12.0 19.1 1,750.8 1,396.7 24.0 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8 2	August September	341.2	336.2	5.0	0.0	0.3	1.0	0.0	0.5	1.7	126.0	70.5	28.8 28.8 8.8	 	13.9	0.0 8.0	6.7	9.0	0.0	0.2	23.3 23.3
1,742.1 1,4456.8 306.3 54.0 18.8 160.0 16.3 110.4 218.7 3179 156.8 33.8 20.8 18.2 21.3 36.7 21.7 11.8 22.7 11.8 159.7 17.4 106.8 218.7 318.4 156.8 33.8 20.9 18.2 21.3 36.6 22.2 11.8 22.7 11.8 22.7 11.8 159.3 15.3 54.0 18.8 159.7 17.4 106.8 218.7 318.4 156.8 33.8 20.9 18.2 21.3 36.6 22.2 11.8 22.7 11.8 22.7 11.8 152.0 59.3 4.9 1.4 11.0 0.7 6.0 13.4 28.5 18.6 2.0 3.3 0.8 15.9 20.7 2.4 0.9 2.3 17.9 17.3 159.3 57.9 56.6 1.0 12.7 0.8 55.3 13.4 33.0 18.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.3 17.9 17.3 159.3 57.9 56.6 1.0 12.7 0.8 55.3 13.4 33.0 18.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.3 17.9 17.9 18.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.3 17.9 17.9 18.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.3 17.9 17.9 17.9 17.9 17.4 10.3 0.0 6.7 0.2 1.2 3.0 1.4 0.3 2.8 17.9 17.9 17.4 10.3 0.0 6.7 0.2 1.2 3.0 1.4 0.3 2.9 17.9 17.9 17.9 17.9 17.9 17.9 17.9 17	Total Grains 1/ 1988/89 1989/90	1,561.4		204.2	35.7	17.2	164.1	15.2	106.3	183.8	298.0	148.6 155.2	32.7	18.2	18.4	16.0	0.04 9.4.6	21.3	16.6	25.2	200.0 196.2
202.7 152.4 50.3 5.9 1.0 11.5 0.6 5.1 12.7 30.6 19.0 2.0 3.2 0.8 10.6 24.6 0.8 0.9 2.3 ord. 211.3 152.0 59.3 4.9 1.4 11.0 0.7 6.0 13.4 28.5 18.6 2.0 3.3 0.8 15.9 20.7 2.4 0.9 2.3 ord. 211.3 152.0 59.3 5.9 1.0 12.7 0.8 5.5 13.2 33.2 17.9 2.1 3.4 0.9 16.4 22.0 0.9 1.0 2.3 ord. 217.3 159.3 57.9 5.6 1.0 12.7 0.8 5.5 13.4 33.0 18.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.2 ord. 217.3 159.3 67.7 12.2 0.0 0.8 1.5 0.0 0.1 12.2 17.4 10.3 0.0 6.5 0.2 1.3 3.4 1.5 0.3 2.9 ord. 68.9 0.2 1.3 3.4 1.5	August September	1,742.1	1,435.8	306.3	54.0	18.8	160.0	16.3	110.4	218.7	317.9	156.8 156.8	33.8	20.8	18.2	21.3	36.7	21.7	<u> </u>	22.7	196.1
219.2 160.9 58.3 5.5 1.0 12.7 0.8 5.5 13.2 33.2 17.9 2.1 3.4 0.9 16.4 22.0 0.9 1.0 2.3 2.1 217.3 159.3 57.9 5.6 1.0 12.8 0.8 5.3 13.4 33.0 18.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.2 2.1 3.4 0.9 16.4 20.5 0.9 1.0 2.2 2.1 3.4 15.9 0.9 1.0 0.0 0.1 12.8 19.1 8.3 0.0 6.5 0.2 0.9 3.4 1.3 0.4 3.0 0.0 0.1 12.2 17.4 10.3 0.0 6.7 0.2 1.2 3.0 1.4 0.3 2.8 0.0 0.1 12.0 0.0 0.1 12.0 20.5 10.0 0.0 6.9 0.2 1.3 3.4 1.5 0.3 2.9 0.0 0.0 0.1 12.0 20.5 10.0 0.0 6.9 0.2 1.3 3.4 1.5 0.3 2.9	Oilseeds 2/ 1988/89 1989/90 prel.	202.7	152.4	50.3 59.3	6.9	0.1	11.5	0.6	5.1	12.7	30.6	19.0	2.0	8. 8. 8. 8.	8.0	10.6	24.6	0.8	0.0	2, 2, 6, 6,	20.9
84.8 69.4 15.4 0.0 1.4 1.6 0.0 0.1 12.6 19.1 8.3 0.0 6.5 0.2 0.9 3.4 1.3 0.4 3.0 proj. 96.6 71.7 14.9 0.0 0.9 1.5 0.0 0.1 11.5 21.0 9.4 0.0 6.9 0.2 1.3 3.4 1.5 0.3 2.9 proj. 86.9 72.1 14.7 0.0 0.9 1.5 0.0 0.1 12.0 20.5 10.0 0.0 6.9 0.2 1.3 3.4 1.5 0.3 2.9		219.2 217.3	160.9	58.3	5.5	0.0	12.7	0.8		13.2	33.2	17.9	2.1	6. 6. 4. 4.	6.0	16.4	22.0	0.9	0.0.	2. 2. 2. 2.	22.1
84.8 69.4 15.4 0.0 1.4 1.2 19.1 8.3 0.0 6.5 0.2 0.9 3.4 1.3 0.4 3.0 proj. 79.9 67.7 12.2 0.0 0.8 1.5 0.0 0.1 12.2 17.4 10.3 0.0 6.7 0.2 1.2 3.0 1.4 0.3 2.8 proj. 86.6 71.7 14.9 0.0 0.9 1.6 0.0 0.1 11.5 21.0 9.4 0.0 6.9 0.2 1.3 3.4 1.5 0.3 2.9 oer 86.9 72.1 14.7 0.0 0.9 1.5 0.0 0.1 12.0 20.5 10.0 0.0 6.9 0.2 1.3 3.4 1.6 0.3 2.9	2450							1	Aillion 480-	-Pound E	Sales	5				·					
B6.6 71.7 14.9 0.0 0.9 1.6 0.0 0.1 11.5 21.0 9.4 0.0 6.9 0.2 1.3 3.4 1.5 0.3 2.9 lber 86.9 72.1 14.7 0.0 0.9 1.5 0.0 0.1 12.0 20.5 10.0 0.0 6.9 0.2 1.3 3.4 1.6 0.3 2.9	1988/89 1989/90 prel.	84.8	69.4	15.4	0.0	1.4	6.1.	0.0	0.1	12.6	19.1	6.3	0.0	6.5	0.2	0.9	8. 6. 4.0.	L. L.	0.0	2.8	10.7
		86.6 86.9		14.9	0.0	6.0	1.6	0.0	0.1	11.5	21.0	9.4	0.0	6.9	0.2	<u></u>	4.6.	1. 1. 1. 1. 1. 1. 1. 1.	0.0	2.9	10.8

1/ Includes total of wheat, coarse grains, and rice (milled) shown above. Estimates of Soviet total grain production, including wheat, coarse grains, rice (rough), minor grains and pulses are 195.1 million tons in 1988/89, 210.9 million in 1989/90, and 230.0 million forecast in 1990/91.
 2/ Totals for major regions and countries include the six major oilseeds shown elsewhere in this report, while world and total foreign also include copra and palm kernels for all countries. Note: Entries of 0.0 indicate no reported or insignificant production.

Wheat Area, Yield, and Production
World and Selected Countries and Regions

TABLE 3

		AREA			YIEL	_D			PRODU	CTION	
COUNTRY/REGION	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/9 Aug.	1 Proj. Sept.	1988/89	Prel. 1989/90	1990/9 ⁻ Aug.	Proj. Sept.
	Mill	ion Hecta	res	Ме	tric Tons	Per Hec	tare	1	Million Me	tric Tons	
World	218.2	226.0	231.3	2.30	2.38	2.53	2.54	500.7	538.1	583.7.	586.9
United States	21.5	25.2	28.3	2.29	2.20	2.60	2.65	49.3	55.4	73.6	75.0
Total Foreign	196.6	200.8	203.0	2.30	2.40	2.52	2.52	451.4	482.7	510.1	511.9
Maj. Foreign Exporters	42.1	44.3	45.7	2.69	2.87	2.97	2.97	113.1	127.2	135.3	135.8
Argentina	4.7	5.5	6.0	1.79	1.86	1.92	1.92	8.4	10.2	11.5	11.5
Australia	8.9	8.9	10.0	1.57	1.58	1.48	1.50	14.1	14.1	14.5	15.0
Canada	13.0	13.6	14.1	1.23	1.79	2.06	2.03	16.0	24.3	29.0	28.6
EC-12	15.5	16.3	15.6	4.82	4.83	5.15	5.18	74.7	78.6	. 80.3	80.8
Major Importers	95.9	97.2	97.7	2.39	2.49	2.65	2.65	229.3	242.4	258.4	259.3
Brazil	3.5	3.4	3.0	1.68	1.65	1.59	1.50	5.8	5.6	5.1	4.5
China	28.8	29.8	30.3	2.97	3.04	3.15	3.17	85.4	90.8	95.5	96.0
Eastern Europe	1.0.7	10.7	10.7	4.17	4.15	4.10	4.15	44.8	44.2	43.9	44.3
Egypt	0.6	0.6	0.7	4.76	5.05	5.71	5.71	2.8	3.2	4.0	4.0
Other N. Africa 1/	4.0	4.7	5.2	1.26	1.13	1.02	1.06	5.0	5.3	4.9	5.5
Japan	0.3	0.3	0.3	3.62	3.47	3.52	3.52	1.0	1.0	1.0	1.0
USSR	48.1	47.7	47.5	1.76	1.94	2.19	2.19	84.4	92.3	104.0	104.0
Other Foreign	58.6	59.4	59.7	1.86	1.91	1.95	1.96	109.0	113.1	116.4	116.8
India	23.1	24.1	23.7	2.00	2.24	2.28	2.28	46.2	54.0	54.0	54.0
Iran	6.3	6.3	6.3	1.08	1.08	1.08	1.08	6.8	6.8	6.8	6.8
Mexico	0.8	1.0	0.9	4.00	4.21	4.12	4.12	3.2	, 4.0	3.5	3.5
Non-EC W. Europe	0.8	0.8	0.9	5.02	5.17	5.02	5.27	3.9	4.4	4.5	4.8
Pakistan	7.3	7.7	7.8	1.73	1.87	1.87	1.87	12.7	14.4	14.6	14.6
South Africa	2.0	1.8	1.9	1.78	1.09	1.35	1.35	3.5	2.0	2.5	2.5
Turkey	8.8	8.7	8.8	1.71	1.32	1.60	1.60	15.0	11.5	14.0	14.0
Others	9.6	8.9	9.5	1.84	1.79	1.73	1.74	17.7	16.0	16.5	16.6

^{1/} Algeria, Libya, Morocco, and Tunisia.

SEPTEMBER 1990

TABLE 4
Coarse Grains Area, Yield, and Production
World and Selected Countries and Regions

		AREA			YIELI) * · · · ·			PRODU	ICTION	
COUNTRY/REGION	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/91 Aug.	Proj. Sept.	1988/89	Prel. 1989/90	1990/91 Aug.	Proj. Sept.
TOTAL COARSE GRAINS	Milli	on Hecta	res	Met	ric Tons	Per Hect	are	M	lillion Met	ric Tons-	
World	325.1	322.4	323.3	2.25	2.48	2.52	2.54	730.5	799.6	817.2	821.6
United States	32.8	37.1	36.6	4.56	5.97	6.23	6.44	149.7	221.4	227.7	235.3
Total Foreign	292.3	285.3	286.7	1.99	2.03	2.05	2.04	580.8	578.2	589.5	586.3
Maj. Foreign Exporters Argentina Australia Canada South Africa Thailand	20.8 2.9 4.4 7.1 4.6 1.8	21.3 3.1 4.0 8.3 4.4 1.6	21.5 3.3 4.2 8.1 4.4 1.5	2.46 2.49 1.52 2.76 2.86 2.50	2.48 2.65 1.75 2.84 2.27 2.71	2.53 2.85 1.55 3.07 2.11 2.89	2.56 2.85 1.55 3.16 2.11 2.89	51.1 7.3 6.7 19.7 13.0 4.4	52.8 8.1 6.9 23.5 10.0 4.2	54.7 9.5 6.6 25.0 9.3 4.3	55.2 9.5 6.6 25.4 9.3 4.3
Major Importers Eastern Europe EC-12 Other W. Europe Mexico USSR Other Major Import. 2/	106.3 18.2 19.2 3.2 7.5 57.8 0.5	103.8 18.2 18.5 3.1 7.5 56.0 0.4	101.5 18.2 17.9 3.0 7.9 54.0 0.4	2.57 3.37 4.60 3.54 1.85 1.69 3.40	2.72 3.74 4.41 3.98 1.88 1.87 3.34	2.81 3.62 4.31 3.91 1.89 2.09 3.34	2.78 3.42 4.32 4.17 1.89 2.09 3.34	273.5 61.3 88.1 11.4 13.8 97.5 1.5	282.3 67.9 81.7 12.3 14.1 104.8 1.4	285.6 66.3 78.2 11.8 15.0 113.0 1.4	281.8 62.3 77.4 12.6 15.0 113.0 1.4
Other Foreign Brazil China India Indonesia Nigeria Philippines Turkey Others	165.2 13.4 28.3 39.1 2.9 10.1 3.8 4.4 63.3	160.3 12.8 28.5 38.6 2.6 9.9 3.6 4.4 59.9	163.6 13.3 28.7 39.4 2.8 10.1 3.7 4.5 61.3	1.55 2.00 3.33 0.81 1.82 0.84 1.21 2.29 1.19	1.52 1.84 3.32 0.81 1.85 0.82 1.24 1.68 1.15	1.52 1.88 3.36 0.82 1.79 0.84 1.24 1.91 1.12	1.52 1.92 3.36 0.82 1.79 0.84 1.24 1.91 1.12	256.2 26.7 94.2 31.7 5.2 8.5 4.5 10.0 75.3	243.1 23.4 94.6 31.2 4.8 8.1 4.5 7.4 69.0	249.2 24.9 96.4 32.3 5.0 8.5 4.6 8.5 69.0	249.3 25.4 96.4 32.3 5.0 8.5 4.6 8.5 68.6
BARLEY											
World	77.5	74.3	73.6	2.16	2.27	2.40	2.39	167.3	168.9	176.0	176.2
United States	3.1	3.4	3.1	2.04	2.61	2.80	2.84	6.3	8.8	8.8	8.9
Total Foreign	74.4	71.0	70.4	2.16	2.26	2.38	2.37	161.0	160.1	167.3	167.3
Australia Canada China Eastern Europe EC-12 Other W. Europe Turkey USSR Others	2.2 4.2 3.7 4.5 12.2 1.7 3.3 29.7 12.8	2.4 4.7 3.3 4.6 11.8 1.5 3.4 27.6 11.8	2.4 4.6 3.3 4.6 11.4 1.5 3.4 26.0 13.3	1.47 2.46 1.67 3.77 4.13 3.30 2.12 1.50 1.31	1.74 2.50 1.74 4.23 3.93 3.85 1.46 1.75 1.17	1.51 2.83 1.73 4.00 3.86 3.68 1.76 2.15 1.09	1.51 2.83 1.73 3.91 3.91 3.98 1.76 2.15 1.08	3.3 10.2 6.2 17.1 50.2 5.7 7.0 44.5 16.8	4.1 11.7 5.7 19.3 46.2 5.8 4.9 48.5 13.9	3.6 13.0 5.7 18.4 44.9 5.6 6.0 56.0 14.1	3.6 13.0 5.7 17.9 44.8 5.9 6.0 56.0 14.4

FOOTNOTES AT END OF TABLE

CONTINUED

September 1990

TABLE 4 (Continued)

Coarse Grains Area, Yield, and Production World and Selected Countries and Regions

		AREA			YIELD				PRODU	ICTION	
COUNTRY/REGION	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/91 Aug.	Proj. Sept.	1988/89	Prel. 1989/90	1990/91 Aug.	Proj. Sept.
CORN	Milli	on Hecta	res	M e	tric Tons	Per Hect	are	N	lillion Met	ric Tons-	
World	124.7	126.0	127.5	3.21	3.66	3.67	3.71	400.4	460.8	470.3	472.6
United States	23.6	26.2	27.0	5.31	7.29	7.39	7.64	125.2	191.2	199.4	206.2
Total Foreign	101.1	99.8	100.5	2.72	2.70	2.68	2.65	275.2	269.6	270.9	266.4
Maj. Foreign Exporters Argentina South Africa Thailand	7.1 1.7 3.8 1.6	6.6 1.6 3.6 1.4	6.9 2.0 3.6 1.4	3.05 2.94 3.28 2.63	2.75 3.09 2.56 2.86	2.77 3.33 2.36 3.04	2.77 3.33 2.36 3.04	21.6 5.0 12.4 4.2	18.2 5.0 9.2 4.0	19.1 6.5 8.5 4.1	19.1 6.5 8.5 4.1
Major Importers Eastern Europe EC-12 Other W. Europe Mexico USSR Other Maj. Import. 2/	22.0 7.1 4.1 0.2 6.0 4.4 0.1	21.2 7.1 3.9 0.2 5.8 4.1.	21.2 7.0 3.6 0.2 6.2 4.0 0.1	3.82 3.78 7.00 8.55 1.68 3.62 4.20	3.94 4.21 6.89 7.68 1.68 3.71 4.17	3.79 4.11 6.60 8.35 1.72 3.63 4.14	3.61 3.65 6.45 8.35 1.72 3.63 4.14	84.0 27.0 28.5 1.9 10.1 16.0 0.4	83.5 29.7 26.5 1.7 9.8 15.3 0.5	80.9 29.5 24.0 1.8 10.7 14.5 0.5	76.4 25.6 23.3 1.8 10.7 14.5 0.5
Other Foreign Brazil Canada China Egypt India Indonesia Philippines Zimbabwe Others	72.1 12.9 1.0 19.7 0.8 5.9 2.9 3.8 1.2 23.9	72.0 12.2 1.0 20.4 0.8 6.0 2.6 3.6 1.2 24.2	72.4 12.7 1.0 20.5 0.9 6.0 2.8 3.7 1.2 23.7	2.35 2.02 5.47 3.93 5.20 1.40 1.82 1.21 1.56 1.53	2.33 1.84 6.36 3.88 5.37 1.33 1.85 1.24 1.67	2.34 1.89 6.25 3.90 5.41 1.33 1.79 1.24 1.70 1.50	2.36 1.93 6.64 3.90 5.41 1.33 1.79 1.24 1.74	169.6 26.1 5.4 77.4 4.3 8.3 5.2 4.5 1.9 36.5	167.9 22.5 6.4 78.9 4.5 8.0 4.8 4.5 2.0 36.3	170.9 24.0 6.5 80.0 4.6 8.0 5.0 4.6 2.1 36.1	170.9 24.5 6.9 80.0 4.6 8.0 5.0 4.6 2.0 35.3
<u>SORGHUM</u>											
World	42.6	42.3	42.2	1.30	1.31	1.29	1.31	55.4	55.6	54.6	55.2
United States	3.7	4.5	3.7	4.00	3.48	3.71	3.88	14.6	15.7	13.9	14.5
Total Foreign	39.0	37.8	38.4	1.05	1.06	1.06	1.06	40.8	39.9	.40.7	40.7
Argentina Australia China India Mexico Nigeria South Africa Sudan Thailand Others	0.6 0.7 1.8 14.8 1.1 4.4 0.3 5.3 0.2 9.8	0.7 0.4 1.8 15.5 1.3 4.4 0.3 3.5 0.2 9.7	0.7 0.6 1.8 15.3 1.3 4.4 0.3 4.4 0.1 9.4	2.33 1.65 3.14 0.71 2.83 0.80 1.58 0.83 1.35 1.07	2.86 2.47 2.94 0.74 2.88 0.80 1.65 0.64 1.33 1.02	3.00 1.94 3.02 0.75 2.85 0.80 1.65 0.64 1.43 1.01	3.00 1.94 3.02 0.75 2.85 0.80 1.65 0.64 1.43 1.02	1.4 1.2 5.6 10.5 3.1 3.5 0.4 4.4 0.2 10.4	2.0 0.9 5.4 11.5 3.8 3.5 0.5 2.3 0.2 9.9	2.1 1.2 5.5 11.5 3.7 3.5 0.5 2.8 0.2 9.7	2.1 1.2 5.5 11.5 3.7 3.5 0.5 2.8 0.2 9.6

FOOTNOTES AT END OF TABLE

CONTINUED

September 1990

TABLE 4 (Continued)

Coarse Grains Area, Yield, and Production World and Selected Countries and Regions

		AREA			YIEL)			PRODU	ICTION	
COUNTRY/REGION	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/91 Aug.	Proj. Sept.	1988/89	Prel. 1989/90	1990/91 Aug.	Proj. Sept.
OATS	Milli	on Hecta	res	Ме	tric Tons	Per Hect	are	N	fillion Met	ric Tons-	
World	22.1	22.7	21.7	1.70	1.85	1.91	1.93	37.6	41.9	41.7	41.8
United States	2.2	2.8	2.5	1.41	1.95	2.12	2.12	3.2	5.4	5.3	5.3
Total Foreign	19.9	19.9	19.2	1.73	1.83	1.88	1.90	34.4	36.5	36.4	36.5
USSR	10.9	10.8	10.5	1.40	1.57	1.62	1.62	15.3	16.8	17.0	17.0
Maj. Foreign Exporters Argentina Australia Canada Sweden	3.5 0.4 1.3 1.4 0.4	3.7 0.4 1.1 1.7 0.4	3.4 0.5 1.1 1.5 0.3	1.94 1.27 1.49 2.18 3.14	1.99 1.44 1.49 2.08 3.54	2.03 1.33 1.36 2.25 3.86	2.05 1.33 1.36 2.36 3.80	6.8 0.5 2.0 3.0 1.3	7.3 0.6 1.7 3.5 1.5	7.2 0.6 1.5 3.6 1.5	7.0 0.6 1.5 3.5 1.3
Other Foreign China Eastern Europe East Germany Poland EC-12 France West Germany Finland Norway Others	5.4 0.6 1.4 0.1 0.9 1.8 0.3 0.6 0.4 0.1 1.2	5.5 0.6 1.4 0.1 0.8 1.7 0.3 0.5 0.4 0.1	5.3 0.6 1.3 0.2 0.7 1.6 0.2 0.5 0.5	2.28 1.19 2.62 3.43 2.61 3.11 3.77 4.23 2.21 3.09 1.09	2.26 1.15 2.70 3.33 2.74 2.78 3.78 3.78 3.24 3.53 1.10	2.30 1.21 2.67 3.87 2.60 3.08 3.80 4.38 2.90 3.32 1.09	2.37 1.21 2.67 4.00 2.55 3.07 3.80 4.38 3.30 4.77 1.10	12.4 0.7 3.7 0.5 2.2 5.5 1.0 2.4 0.9 0.4 1.3	12.3 0.6 3.7 0.5 2.2 4.7 1.0 1.9 1.4 0.4 1.4	12.2 0.7 3.7 0.6 2.1 4.9 0.9 2.1 1.2 0.4 1.4	12.5 0.7 3.5 0.6 1.9 4.9 0.9 2.1 1.5 0.6 1.4
<u>RYE</u>											
World	15.9	16.9	16.8	2.08	2.21	2.28	2.31	33.0	37.4	38.0	38.8
United States	0.2	0.2	0.2	1.55	1.76	1.89	1.89	0.4	0.3	0.3	0.3
Total Foreign	15.6	16.7	16.6	2.09	2.22	2.29	2.31	32.6	37.1	37.6	38.4
USSR	10.1	10.7	10.5	1.83	1.87	2.00	2.00	18.5	20.1	21.0	21.0
Maj. Foreign Exporter Canada	0.3	0.5	0.5	1.04	1.74	1.67	1.73	0.3	0.9	0.9	0.9
Other Foreign Eastern Europe East Germany Poland Czechoslovakia EC-12 Denmark West Germany Others	3.9 0.6 2.9 0.2 0.9 0.1 0.4 0.5	3.9 0.6 2.9 0.2 1.0 0.1 0.4 0.6	4.0 0.6 3.1 0.2 1.0 0.1 0.4 0.6	2.59 2.94 2.52 3.42 3.05 4.52 4.19 2.06	2.96 3.34 2.94 3.42 3.31 4.80 4.69 2.28	2.92 3.77 2.80 3.42 3.19 4.35 4.47 2.26	2.94 3.61 2.85 3.42 3.36 4.78 4.75 2.39	10.0 1.8 7.2 0.5 2.9 0.4 1.6 1.0	11.6 2.1 8.6 0.5 3.2 0.5 1.8 1.3	11.4 2.3 8.2 0.5 3.2 0.5 1.9 1.2	11.9 2.2 8.7 0.5 3.3 0.6 2.0 1.3

^{1/} Total of barley, corn, sorghum, oats, and rye shown below plus millet and mixed grain. 2/ Japan, Republic of Korea, and Taiwan.

September 1990

TABLE 5

Rice Area, Yield, and Production World and Selected Countries and Regions

					2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				0.000	ATTO AT	-		0.44	2440					
COUNTRY/REGION		AMEA							(Rough Basis)	Sasis)			MILLING MAIE	MAIE			(Milled Basis)	Sis)	
		Pref.	Proj.		Prel.	1990/91 Proj.	Proj.		Prel.	1990/91 Proj.	roj.		Pref.	1990/91 Proj.	Proj.		Prel.	1990/91 Proj	Proj.
	1988/89	1989/90	1990/91	1988/8	1989/9	Aug.	Sept. 1	1988/89 1	1989/90	Aug.	Sept. 1	1988/89	1989/90	Aug.	Sept.	1988/89	1989/90	Aug.	Sept.
	-Will	-Million Hectares-		Metr	-Metric Tons Per Hectare-	er Hectar	1	-Wil	-Million Metric Tons-	ic Tons	1		-In Percent-	ant—		-Will		Tons-	ł
World	145.4	146.3	146.1	3.4	3.5	3.5	3.5	487.7	504.7	505.4	6.909	67.7	9.79	67.5	67.5	330.2	341.0	341.2	342.2
United States	1.2	Ξ.	Ξ.	6.2	6.4	6.3	6.3	7.3	7.0	7.2	7.2	71.5	73.0	70.0	70.0	5.2	5.1	5.0	5.0
Total Foreign	144.2	145.2	144.9	က က	3.4	3.4	3.4	480.4	497.7	498.2	499.7	67.6	67.5	67.5	67.5	325.0	335.8	336.2	337.1
Maj. Foreign Exporters	16.5	17.0	17.0	2.3	2.3	2.3	2.4	38.4	39.1	39.8	40.3	1.49	64.0	64.0	0.4.0	24.6	25.0	25.5	25.8
Burma	4.5	4.7	4.9	2.8	5.9	8.2	5.9	12.5	13.5	13.5	14.0	60.0	0.09	0.09	0.09	7.5	8.1	8.1	8.4
Pakistan	2.0	2.1	2.1	2.4	2.3	2.5	2.5	4.8	4.8	5.3	5.3	66.7	66.7	66.7	66.7	3.2	3.2	3.5	3.5
Thailand	6.6	10.2	10.0	2.1	2.0	2.1	2.1	21.1	20.8	21.0	21.0	0.99	0.99	0.99	0.99	13.9	13.7	13.9	13.9
Major Importers	13.0	13.7	13.2	4.3	4.3	4.4	4.4	55.8	58.3	57.5	57.6	86.2	1.98	66.1	66.1	36.9	38.5	38.0	38.1
EC-12	0.3	0.3	0.4	5.6	5.9	0.9	0.9	2.0	5.0	2.2	2.2	67.3	0.79	67.3	67.3	د . ا	د .	1.5	1.5
Indonesia	8.8	10.4	10.0	4.3	4.3	4.5	4.5	42.3	44.8	44.3	44.3	65.0	65.0	65.0	65.0	27.5	29.1	28.8	28.8
Nigeria	9.0	9.0	0.7	1.3	1.4	1.5	1.5	0.8	6.0	1.0	1.0	66.5	96.5	96.5	66.5	9.0	9.0	9.0	9.0
Republic of Korea	1.3	1.3	1.2	6.6	6.5	6.4	6.4	8.4	8.2	7.6	7.6	72.3	72.0	72.0	72.0	6.1	6.3	5.5	5.5
Other Maj. Import. 1/	1.0	1.0	7	2.3	2.4	2.4	2.3	2.3	2.5	2.4	2.5	65.4	65.5	65.5	65.5	1.5	1.6	1.5	1.6
Other Foreign	114.7	114.5	114.7	3.4	3.5	3.5	3.5	386.2	400.3	401.0	401.8	68.2	0.88	0.88	0.89	263.4	272.3	272.7	273.3
Australia	0.1	0.1	0.1	7.9	8.2	8.0	8.0	0.8	6.0	8.0	0.8	71.5	71.5	71.5	71.5	9.0	0.7	9.0	9.0
Bangladesh	10.2	10.7	10.6	2.3	2.5	2.4	2.5	23.3	27.0	25.5	26.3	66.7	68.7	66.7	66.7	15.6	18.0	17.0	17.5
Brazil	5.3	4.3	4.8	2.1	1.9	5.0	2.0	11.0	8.2	8.6	8.8	68.0	0.88	68.0	0.88	7.5	5.6	6.7	6.7
China	31.9	32.7	32.3	5.3	5.5	5.6	9.6	169.1	180.1	180.0	180.0	70.0	70.0	0.07	70.0	118.4	126.1	128.0	126.0
India	41.9	41.5	41.8	2.5	2.5	2.5	2.5	106.0	105.0	105.8	105.8	66.7	66.7	66.7	66.7	7.07	0.07	70.5	70.5
Japan	2.1	2.1	2.1	5.8	6.2	6.2	6.2	12.4	12.9	12.9.	12.9	72.8	72.8	72.8	72.8	0.6	9.4	9.4	9.4
Philippines	3.5	3.4	3.5	2.6	2.6	2.7	2.7	9.5	8.9	9.6	9.6	65.0	65.0	65.0	65.0	9 .0	5.8	6.2	6.2
USSR	0.7	0.7	0.7	4.3	3.9	4.0	4.0	5.9	2.8	2.6	2.8	65.0	65.0	65.0	65.0	1.9	1.7	1.7	1.7
Vietnam	5.8	6.5	5.9	2.9	3.1	3.0	3.0	16.8	18.0	17.5	17.5	65.0	65.0	65.0	65.0	10.9	11.7	11.4	11.4
Others	13.3	13.1	13.0	2.6	2.8	2.8	2.8	34.6	36.7	36.5	36.5	86.2	63.8	63.8	63.8	22.9	23.4	23.3	23.3

1/ Hong Kong, Iran, Iraq, Ivory Coast, and Saudi Arabia.

Oilseeds Area, Yield, and Production
World and Selected Countries and Regions

		AREA			YIELD				PRODU	CTION	p 4 %
COUNTRY/REGION		Prel.	Proj.	*	Prel.	1990/91	Proj.		Prel.	1990/91	Proj.
	1988/89	1989/90	adaga an an il Tellagada	1988/89	1989/90	Aug.	Sept.	1988/89	1989/90	Aug.	Sept
	Milli	on Hecta	res	Met	ric Tons P	er Hectar	θ	M	lillion Met	ric Tons-	
SOYBEANS											
World	55.78	57.67	56.41	1.71	1.84	1.88	1.86	95.42	106.08	106.70	105.18
United States	23.22	24.03	22.89	1.82	2.18	2.18	2.18	42.15	52.44	49.97	49.93
Total Foreign	32.57	33.64	33.52	1.64	1.59	1.68	1.65	53.27	53.64	56.73	55.25
Maj. Foreign Exporters	16.17	16.38	16.30	1.83	1.84	1.90	1.84	29.60	30.10	31.50	30.00
Argentina ·	4.00	5.00	5.30	1.60	2.16	2.08	2.08	6.40	10.80	11.00	11.00
Brazil	12.17	11.38	11.00	1.91	1.70	1.81	1.73	23.20	19.30	20.50	19.00
Other Foreign	16.40	17.25	17.22	1.44	1.36	1.46	1.47	23.67	23.54	25.23	25.25
Canada	0.53	0.54	0.50	2.16	2.26	2.31	2.60	1.15	1.22	1.20	1.30
China Furana	8.12	8.06	8.03	1.43	1.27 1.50	1.47 1.42	1.47	11.65	10.23	11.80	11.80
Eastern Europe EC-12	0.56 0.53	0.54 0.61	0.54 0.62	3.10	3.20	3.21	3.21	1.66	1.95	1.99	1.99
India	1.66	1.90	2.00	0.91	0.89	0.90	0.90	1.50	1.70	1.80	1.80
Indonesia	1.18	1.15	1.25	1.02	0.83	0.96	0.96	1.20	1.10	1.20	1.20
Paraguay	0.85	0.98	0.90	1.90	1.38	1.78	1.78	1.62	1.35	1.60	1.60
USSR	0.76	0.83	0.84	1.16	1.15	1.10	1.10	0.88	0.96	0.92	0.92
Others	2.21	2.64	2.55	1.52	1.60	1.55	1.55	3.35	4.23	3.94	3.94
COTTONSEED											
World	33.6 9	32.77	33.88	0.96	0.93	0.98	0.98	32.33	30.61	33.16	33.35
United States	4.84	3.86	4.64	1.14	1.10	1.13	1.12	5.50	4.24	5.24	5.20
Total Foreign	28.86	28.91	29.24	0.93	0.91	0.95	0.96	26.83	26.37	27.93	28.15
China	5.53	5.20	5.50	1.27	1.24	1.41	1.37	7.05	6.44	7.75	7.55
India	7.30	7.60	7.80	0.49	0.59	0.53	0.56	3.56	4.49	4.10	4.36
Pakistan	2.51	2.60	2.64	1.14	1.12	1.14	1.14	2.85	2.91	3.01	3.01
USSR	3.43	3.33	3.25	1.46	1.41	1.42	1.48	5.00	4.70	4.60	4.80
Others	10.09	10.18	10.05	0.83	0.77	0.84	0.84	8.36	7.84	8.47	8.44
<u>PEANUTS</u>											
World	19.74	19.46	19.12	1.18	1.11	1.15	1.13	23.24	21.63	21.96	21.63
United States	0.66	0.67	0.71	2.74	2.72	2.75	2.29	1.81	1.81	1.90	1.61
Total Foreign	19.09	18.79	18.41	1.12	1.05	1.09	1.09	21.44	19.82	20.07	20.02
Argentina	0.15	0.18	0.19	1.62	2.06	2.32	2.32	0.24	0.37	0.43	0.43
China	2.91	2.95	3.05	1.95	1.82	1.90	1.90	5.69	5.36	5.80	5.80
India	8.43	8.40	7.80	1.07	0.92	0.94	0.94	9.00	7.70	7.30	7.30
Senegal	0.90	0.79	0.77	0.76	0.93	0.94	0.87	0.69	0.74	0.72	0.67
South Africa	0.19	0.19	0.19	1.24	1.24	1.26	1.26	0.23	0.23	0.24	0.24
Sudan	0.58	0.55	0.55	0.78	0.73	0.73	0.73	0.45	0.40	0.40	0.40
Others	5.93	5.74	5.87	0.87	0.88	0.88	0.88	5.13	5.03	5.18	5.18

CONTINUED

TABLE 6 (Continued)

Oilseeds Area, Yield, and Production World and Selected Countries and Regions

		AREA			YIELD				PRODU	CTION	
COUNTRY/REGION		Prel.	Proj.		Prel.	1990/91	Proj.		Prel.	1990/9	1 Proj.
	1988/89	1989/90	1990/91	1988/89	1989/90	Aug.	Sept.	1988/89	1989/90	Aug.	Sept.
SUNFLOWERSEED	Milli	on Hecta	res	Meti	ric Tons P	er Hectar	8	M	lillion Met	ric Tons-	
World	15.00	15.66	16.57	1.36	1.38	1.40	1.38	20.33	21.66	23.22	22.90
United States	0.78	0.74	0.75	1.05	1.10	1.46	1.46	0.81	0.81	1.10	1.10
Total Foreign Argentina China EC~12 East Europe USSR Others	14.22 2.30 0.83 2.13 1.31 4.28 3.38	14.92 2.90 0.73 2.00 1.29 4.46 3.54	15.82 2.90 0.83 2.52 1.29 4.65 3.63	1.37 1.39 1.42 1.88 1.62 1.44 0.85	1.40 1.31 1.34 1.75 1.87 1.59 0.87	1.40 1.38 1.45 1.75 1.80 1.50 0.89	1.38 1.38 1.45 1.72 1.71 1.50 0.85	19.52 3.20 1.18 3.99 2.13 6.16 2.87	20.84 3.80 0.98 3.50 2.42 7.07 3.08	22.12 4.00 1.20 4.36 2.35 7.00 3.21	21.80 4.00 1.20 4.34 2.20 7.00 3.06
RAPESEED											
World	17.89	16.93	17.41	1.26	1.28	1.37	1.36	22.53	21.61	23.70	23.71
Total Foreign Canada China EC-12 East Europe India Others	17.89 3.67 4.94 1.84 0.88 4.87 1.70	16.93 2.90 4.99 1.66 1.00 4.70 1.67	17.41 2.63 5.30 1.93 0.94 4.70 1.90	1.26 1.17 1.02 2.81 2.51 0.86 0.94	1.28 1.07 1.09 2.96 2.65 0.81 1.03	1.37 1.31 1.25 3.01 2.39 0.81 1.02	1.36 1.25 1.25 3.01 2.39 0.81 1.02	22.53 4.31 5.04 5.17 2.20 4.20 1.61	21.61 3.10 5.44 4.92 2.65 3.80 1.71	23.70 3.40 6.60 5.70 2.26 3.80 1.94	23.71 3.30 6.60 5.82 2.26 3.80 1.94
FLAXSEED											
World	3.68	3.71	3.77	0.45	0.52	0.60	0.61	1.66	1.92	2.28	2.31
United States	0.09	0.07	0.09	0.45	0.47	0.89	0.89	0.04	0.03	0.08	0.08
Total Foreign Argentina Canada India USSR Others	3.59 0.54 0.50 1.18 1.04 0.33	3.63 0.60 0.60 1.20 0.87 0.36	3.68 0.60 0.72 1.20 0.78 0.37	0.45 0.86 0.74 0.30 0.21 0.66	0.52 0.86 0.83 0.33 0.26 0.66	0.59 0.88 1.12 0.33 0.21 0.67	0.60 0.88 1.22 0.33 0.21 0.67	1.62 0.46 0.37 0.35 0.22 0.22	1.88 0.52 0.50 0.40 0.23 0.24	2.20 0.53 0.85 0.40 0.17 0.25	2.22 0.53 0.88 0.40 0.17 0.25
MAJOR OILSEEDS	145.79	146.19	147.16	1.34	1.39	1.43	1.42	195.51	203.52	211.02	209.09
United States Total Foreign	29.58 116.21	29.37 116.82	29.08 118.08	1.70 1.25	2.02 1.23	2.01 1.29	1.99 1.28	50.31 145.20	59.34 144.18	58.29 152.73	57.93 151.16
COPRA							~~	4.31	4.57	4.86	4.86
PALM KERNEL	<u></u>						~-	2.91	3.24	3.32	3.32
TOTAL OILSEEDS								202.74	211.32	219.20	217.27
PALM OIL 1/		400 400					*****	9.47	10.73	11.11	11.21

^{1/} Not included in total oilseeds.

Cotton Area, Yield, and Production
World and Selected Countries and Regions

				YIEL			171	RODUCT	ION	
	Prel.	Proj.		Prel.	1990/91	Proj.		Prel.	1990/91	Proj.
1988/89	989/90	1990/91	1988/89	1989/90	Aug.	Sept.	1988/89	1989/90	Aug.	Sept.
Millio	on Hecta	ares	Kilo	ograms P	er Hecta	re	Millio	on 480-l	Pound Ba	ales
34.0	32.6	33.8	542	533	556	560	84.8	79.9	86.6	86.9
4.8	3.9	4.6	694	688	697	691	15.4	12.2	14.9	14.7
29.2	28.7	29.1	517	513	534	539	69.4	67.7	71.7	72.1
13.5	13.1	13.2	748	723	773	777	46.5	43.6	47.2	47.0
0.2	0.2	0.3	1,538	1,204	1306	1,393	1.3	1.4	1.5	1.6
0.1	0.1	0.1	866	846	807	807	0.4	0.3	0.4	0.4
5.5	5.2	5.5	751	728	831	812	19.1	17.4	21.0	20.5
0.4	0.4	0.4	718	695	742	742	1.4	1.3	1.5	1.5
0.3	0.2	0.2	1,209	891	971	936	1.4	0.8	0.9	0.9
2.5	2.6	2.6	568	560	569	569	6.5	6.7	6.9	6.9
0.3	0.3	0.2	437	473	442	456	0.7	0.6	0.7	0.5
0.7	0.7	0.7	882	851	913	913	3.0	2.8	2.9	2.9
3.4	3.4	3.2	801	788	792	827	12.6	12.2	11.5	12.0
0.4	0.4	0.4	837	870	855	884	1.7	1.6	1.7	1.7
15.3	15.2	15.5	304	322	321	329	21.3	22.6	22.9	23.5
0.5	0.6	0.6	389	462	473	473	0.9	1.2	1.3	1.3
2.4	2.2	2.0	311	300	370	370	3.4	3.0	3.4	3.4
7.3	7.6	7.8	247	295	262	279	8.3	10.3	9.4	10.0
0.2	0.2	0.2	667	874	871	871	0.5	0.6	0.6	0.6
4.9	4.7	5.0	363	342	358	358	8.2	7.4	8.2	8.2
	Millio 34.0 4.8 29.2 13.5 0.2 0.1 5.5 0.4 0.3 2.5 0.3 0.7 3.4 0.4 15.3 0.5 2.4 7.3 0.2	Million Hecta 34.0 32.6 4.8 3.9 29.2 28.7 13.5 13.1 0.2 0.2 0.1 0.1 5.5 5.2 0.4 0.4 0.3 0.2 2.5 2.6 0.3 0.3 0.7 0.7 3.4 3.4 0.4 0.4 15.3 15.2 0.5 0.6 2.4 2.2 7.3 7.6 0.2 0.2	4.8 3.9 4.6 29.2 28.7 29.1 13.5 13.1 13.2 0.2 0.2 0.3 0.1 0.1 0.1 5.5 5.2 5.5 0.4 0.4 0.4 0.3 0.2 0.2 2.5 2.6 2.6 0.3 0.3 0.2 0.7 0.7 0.7 3.4 3.4 3.2 0.4 0.4 0.4 15.3 15.2 15.5 0.5 0.6 0.6 2.4 2.2 2.0 7.3 7.6 7.8 0.2 0.2 0.2	Million Hectares 34.0 32.6 33.8 542 4.8 3.9 4.6 694 29.2 28.7 29.1 517 13.5 13.1 13.2 748 0.2 0.2 0.3 1,538 0.1 0.1 0.1 866 5.5 5.2 5.5 751 0.4 0.4 0.4 718 0.3 0.2 0.2 1,209 2.5 2.6 2.6 568 0.3 0.3 0.2 0.2 1,209 2.5 2.6 2.6 568 0.3 0.3 0.2 437 0.7 0.7 0.7 882 3.4 3.4 3.2 801 0.4 0.4 0.4 0.4 837 15.3 15.2 15.5 304 0.5 0.6 0.6 389 2.4 2.2 2.0 311 7.3 7.6 7.8 247 0.2 0.2 0.2 0.2 667	Million Hectares 34.0 32.6 33.8 542 533 4.8 3.9 4.6 694 688 29.2 28.7 29.1 517 513 13.5 13.1 13.2 748 723 0.2 0.2 0.3 1,538 1,204 0.1 0.1 0.1 866 846 5.5 5.2 5.5 751 728 0.4 0.4 0.4 718 695 0.3 0.2 0.2 1,209 891 2.5 2.6 2.6 568 560 0.3 0.3 0.2 0.2 1,209 891 2.5 2.6 2.6 568 560 0.3 0.3 0.2 437 473 0.7 0.7 0.7 882 851 3.4 3.4 3.2 801 788 0.4 0.4 0.4 837 870 15.3 15.2 15.5 304 322 0.5 0.6 0.6 389 462 2.4 2.2 2.0 311 300 7.3 7.6 7.8 247 295 0.2 0.2 0.2 0.2 667 874	Million Hectares 34.0 32.6 33.8 542 533 556 4.8 3.9 4.6 694 688 697 29.2 28.7 29.1 517 513 534 13.5 13.1 13.2 748 723 773 0.2 0.2 0.3 1,538 1,204 1306 0.1 0.1 0.1 866 846 807 5.5 5.2 5.5 751 728 831 0.4 0.4 0.4 718 695 742 0.3 0.2 0.2 1,209 891 971 2.5 2.6 2.6 568 560 569 0.3 0.3 0.2 437 473 442 0.7 0.7 0.7 882 851 913 3.4 3.4 3.2 801 788 792 0.4 0.4 0.4 0.4 837 870 855 15.3 15.2 15.5 304 322 321 0.5 0.6 0.6 389 462 473 2.4 2.2 2.0 311 300 370 7.3 7.6 7.8 247 295 262 0.2 0.2 0.2 0.2 667 874 871	Million Hectares 34.0 32.6 33.8 542 533 556 560 4.8 3.9 4.6 694 688 697 691 29.2 28.7 29.1 517 513 534 539 13.5 13.1 13.2 748 723 773 777 0.2 0.2 0.3 1,538 1,204 1306 1,393 0.1 0.1 0.1 866 846 807 807 5.5 5.2 5.5 751 728 831 812 0.4 0.4 0.4 718 695 742 742 0.3 0.2 0.2 1,209 891 971 936 2.5 2.6 2.6 568 560 569 569 0.3 0.3 0.2 437 473 442 456 0.7 0.7 0.7 882 851 913 913 3.4 3.4 3.2 801 788 792 827 0.4 0.4 0.4 837 870 855 884 15.3 15.2 15.5 304 322 321 329 0.5 0.6 0.6 389 462 473 473 2.4 2.2 2.0 311 300 370 370 7.3 7.6 7.8 247 295 262 279 0.2 0.2 0.2 0.2 667 874 871 871	Million Hectares	Million Hectares 34.0 32.6 33.8 542 533 556 560 84.8 79.9 4.8 3.9 4.6 694 688 697 691 15.4 12.2 29.2 28.7 29.1 517 513 534 539 69.4 67.7 13.5 13.1 13.2 748 723 773 777 46.5 43.6 0.2 0.2 0.3 1,538 1,204 1306 1,393 1.3 1.4 0.1 0.1 0.1 866 846 807 807 0.4 0.3 5.5 5.2 5.5 751 728 831 812 19.1 17.4 0.4 0.4 0.4 718 695 742 742 1.4 1.3 0.3 0.2 0.2 1,209 891 971 936 1.4 0.8 2.5 2.6 2.6 568 560 569 569 6.5 6.7 0.3 0.3 0.2 437 473 442 456 0.7 0.6 0.7 0.7 0.7 882 851 913 913 3.0 2.8 3.4 3.4 3.2 801 788 792 827 12.6 12.2 0.4 0.4 0.4 837 870 855 884 1.7 1.6 15.3 15.2 15.5 304 322 321 329 21.3 22.6 0.5 0.6 0.6 389 462 473 473 0.9 1.2 2.4 2.2 2.0 311 300 370 370 3.4 3.0 7.3 7.6 7.8 247 295 262 279 8.3 10.3 0.2 0.2 0.2 667 874 871 871 0.5 0.6	Million Hectares

^{1/} Nicaragua, Guatemala, El Salvador, Honduras, and Costa Rica.

SEPTEMBER 1990

^{2/} Western Europe, Eastern Europe, Japan, Hong Kong, Republic of Korea, and Taiwan.

The table below presents a 9-year record of the difference between the September projections and the final estimates. Using world wheat production as an example, changes between the September projection and the final estimate have averaged 11.5 million tons (2.3 percent) and ranged from -30.7 to 6.8 million tons. The September projection has been below the final 5 times and above the final 4 times.

RELIABILITY OF PRODUCTION PROJECTIONS

COMMODITY AND	PROJECTION AND FINAL ESTIMATES, 1981/82 - 1989/90 1/					
REGION	Differ	ence	Lowest	Highest	Below	Above
	Average	Average	Diffe	rence	Final	Final
	Percent	Million Metric Tons		Number of Years 2/		
WHEAT						
World	2.3	11.5	-30.7	6.8	5	4
U.S.	0.9	0.6	-1.2	0.8	5	4
Foreign	2.7	11.8	-30.9	7.5	5	4
COARSE GRAINS 3/						
World	1.1	8.9	-22.6	11.3	7	2
U.S.	2.8	5.4	-12.9	6.1	7	2
Foreign	1.4	7.9	-18.9	9.1	4	5
RICE (Milled)						
World	2.8	8.8	-24.1	3.4	8	1
U.S.	4.8	0.2	-0.4	0.3	6	3
Foreign	2.9	8.7	-24.4	3.6	8	1
SOYBEANS						
World	2.7	2.4	-4.4	4.7	4	5
U.S.	4.0	2.0	-2.7	4.6	4	5
Foreign	4.8	2.0	-3.2	2.3	4	5
		A.4:00:-	- 400 lb Dal	,		
COTTON		MIIIIC	on 480-lb. Bal 	es		
World	3.4	2.7	-10.9	4.5	5	4
U.S.	4.4	0.6	-1.9	0.8	4	4
Foreign	3.4	2.4	-11.2	3.7	5	4
UNITED STATES		Million Bushels		1		
CORN	3.2	201	450	224		
SORGHUM	4.0	31	-459 60	224 41	6	3
BARLEY			-69		5	4
OATS	1.9	9	-12 10	24	5	4
UATS	3.0	12	-18	27	3	5

^{1/} The final estimate for 1981/82-1988/89 is defined as the first November estimate following the marketing year and for 1989/90 last month's estimate.
2/ May not total nine if projection was the same as the final.
3/ Includes corn, sorghum, barley, oats, rye, millet, and mixed grain.

September 1990

WORLD AGRICULTURAL WEATHER HIGHLIGHTS

September 12, 1990

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY



Wet weather during August in the southeastern

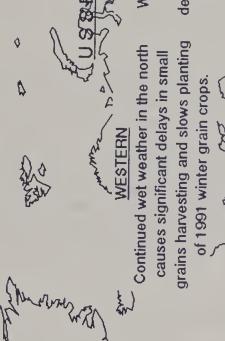
warm weather in early September allows rapid harvest Prairies hampers spring wheat harvesting. Local frost in the northwest causes minor damage. Dry, progress across the southern Prairies.

UNITED STATES

in Gulf coastal states and portions of the southern Great shower activity increase stress on crops and livestock into early September. Record heat and decreasing Timely rain and warmer temperatures generally improve crop conditions across the Combelt Plains from mid-August into early September.

SOUTH AMERICA

In Argentina, mostly dry weather during August favors completion of wheat planting. Recent September rain improves conditions for early growth, except in the north where dryness persists. In southcentral Brazil, locally heavy rain soaks wheat areas of Parana and Rio Grande do Sul

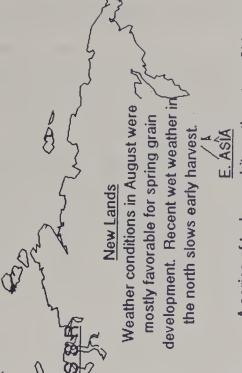


Unseasonable dryness continues to stress summer north. Recent widespread rain across north central and northeast crop areas increases preplanting soil crops across sections of the west and southeast. Early dryness favors winter grain harvest in the

SOUTH ASIA

moisture for winter grains

benefit immature summer crops but cause some flooding cause some flooding and crop damage in northwestern and crop damage in primary oilseed and cotton areas. southern interior. Heavy showers in early September Heavy showers in central and eastern crop regions Sporadic rains bring some relief to India's



fall crops. Typhoons Winona and Zola end long term dryness in sections of southern and eastern Japan. Taiwan, causing flooding and damage to maturing A series of typhoons hit southeastern China and Persistent dryness stresses late crop rice in

SOUTHEAST ASIA south central China. くべ

Highly beneficial showers since late-August improve Inundating rains, produced by frequent typhoon activity, cause flooding and crop damage in the irrigation reserves for secondary Thai grains. northern Philippines.



eastern growing areas. Seasonable dryness favors levels in the southeast. Cooler, drier than normal Occasional rain maintains normal soil moisture weather slows early vegetative development in sugarcane harvest in the northeast

> Subscription information may be obtained by calling (202) 447-7917.) (More details are available in the Weekly Weather and Crop Bulletin.

WEATHER BRIEFS

ARGENTINA: TIMELY PRECIPITATION BENEFITS WHEAT CROP

Precipitation during the first 10 days of September was beneficial for the wheat crop of northern Argentina. Precipitation was below normal in June and almost non-existent in July and August causing some concern for the 1990/91 wheat crop. Soil moisture levels were generally adequate for planting and germination of wheat because precipitation was heavy in May 1990. Wheat planting was accomplished ahead of normal due to favorable planting weather. Soil moisture levels were becoming short coming into September, with wheat going into its vegetative growth stage. Weekly rainfall, during September 2 - 8, 1990, averaged 25-73 millimeters (mm) in the northern two-thirds of Buenos Aires and scattered areas of northeastern La Pampa, 10-25 mm over the remainder of the wheat belt and diminished rapidly to 6 mm or less in the northern wheat areas of Cordoba and Santa Fe. The rainfall so far this month will also benefit summer crops, which are just beginning to be planted now.

EAST AFRICA: DROUGHTS AND FLOODS

Precipitation levels for the 1990 growing season across most of Ethiopia and Sudan have been much below normal. Only a portion of southwest Ethiopia has received substantial precipitation and these rains caused floods in late August and early September. The farmlands of northeast Sudan received 25-50 percent of normal precipitation for the period of May - August, 1990. Temperatures over the northern growing regions of Sudan have been well above normal during August, intensifying the crop stress. During early September, light to moderate precipitation (4-40 mm) and somewhat lower temperatures stabilized crop conditions in northern Sudan and substantial rains (20-70 mm) kept crop conditions from deteriorating further in northern and eastern Ethiopia.

FRANCE AND ENGLAND: CONTINUED DRY

Precipitation has been much below normal since early Spring in southern England and across France. Summer crops, which are being harvested in early September, were hurt by moisture shortages and precipitation will be needed to improve conditions for germination of winter grains. Precipitation levels for August, when much of the summer crops were in the filling stage, were only around 16 percent of normal in northern France, 32 percent of normal in southwest France and 55 percent of normal in the United Kingdom. Temperatures in mid-to-late August were 4 to 6 degrees above normal, further adding to the crop stress. Temperatures for the first 10 days of September have been closer to normal. Precipitation for September 1 - 10, 1990, has remained light and scattered, which will benefit harvesting. Only eastern France received widespread rain in amounts of 10 to 25 mm during early September.

PRODUCTION BRIEFS

AUSTRALIA: 1990/91 WHEAT PRICES FALL

In late August the Australian Wheat Board (AWB) announced that it was reducing the wheat purchase price from the A\$170 level announced earlier to A\$145 per ton, or 15 percent, for the 1990/91 crop which is now approaching harvest. reduction was triggered by falling world wheat prices, a strong Australian dollar, and wheat marketing uncertainties in the Middle East. The lower wheat prices are compounding an already poor farm income year as other commodities such as barley, wool, and sheep meat also have low prices. Due to the expected loss of wheat revenue, producer associations are forecasting a 1990/91 income loss of nearly 50 percent compared to earlier prospects for some wheat growers. The AWB chairman claims that the market situation for wheat this year represents a disaster for Australian farmers. The U.S. agricultural counselor in Canberra reports that the only two bright spots left for farmers this year are the cotton and cattle sectors. With the predominant wheat and wool sectors suffering from low prices, farmers are looking for alternatives but the majority of land devoted to wheat and sheep is unsuitable for other enterprises or has prohibitively high conversion cost.

BRAZIL: GOVERNMENT ANNOUNCES AGRICULTURAL PACKAGE

The Brazilian Government recently announced policy measures aimed at enhancing production of basic food crops such as rice, corn, dry beans, and manioc. Several elements within the policy package directly affect the outlook for planting of the 1990/91 soybean crop. The new policy will regionalize credit allocations to favor areas with lower production and marketing costs and higher productivity. This measure equates to a production disincentive for soybean producers in the remote center-west, but benefits farmers nearer the coast who produce a larger proportion of food crops. In addition, minimum support prices favor production of crops for domestic use while discouraging export crops. The minimum support price for soybean production in the center-west growing region is especially unfavorable.

A key element not addressed by the package is the short term policy on repayment of outstanding farm debts. The government announced its intention to release Cruzados 310 billion in loans for planting 1990/91 crops. However, producers already owe between Cr\$80 and Cr\$120 billion to the rural credit system from prior year loans. If these debts are not paid, extended, or renegotiated, production credit availability for summer crop planting will be reduced. Because of the disincentives in the policy package, the current outlook is for 1990/91 soybean area to decrease from last year's level. Area reductions are expected to be concentrated primarily in the center-west states. Corn area is expected to increase only moderately as most of the area taken out of soybeans is in areas less favorable for corn.

CHINA: BUMPER RICE HARVEST POSSIBLE

China's 1989 rice crop was a record 180.1 million tons (rough basis), and another bumper crop is forecast for 1990. According to the U.S. agricultural trade officer in Guangzhou, favorable Government policies and generally good weather led to a record early rice harvest of more than 50 million tons, and the prospects for single crop and late crop rice remain favorable. Crop conditions in the Yangtze valley are good to excellent, although the recent series of typhoons and tropical storms may have caused locally severe damage to the maturing single crop rice along the coast. In contrast, the late rice crop in parts of Guangdong and Guangxi have been stressed by hot, dry weather this summer. Of the total 1.7 million hectares of late rice planted in Guangdong, about one-third is located in drought-affected areas. Chinese officials estimate that only 5 percent of the planted area in the province is currently at risk, but the late rice crop is entering the crucial heading stage and two more weeks without significant rain would reduce yield prospects.

FINLAND: FORESTRY SITUATION

After 3 years of growth, the boom in Finland's forest products industry appears to be moderating. The production forecasts for 1990 reflect stagnation in those sectors of the industry that are currently faced with rising production costs, new regulations under the recently implemented forest taxation law, and weak international market conditions. However, the long-term prospects appear excellent. Within the next few years, annual fellings are expected to exceed 70 million cubic meters. Current production estimates are as follows in 1,000 cubic meters:

	1988	1989	1990 1/
HARVEST	57,120	58,730	58,000
Softwood Logs	20,050	20,680	20,000
Temperate Hardwood Logs	1,660	1,640	1,650
Poles, Piles, Posts, Pitprops	126	122	120
Softwood Lumber	7,720	7,850	7,800
Temperate Hardwood Lumber	70	68	68
Railroad Ties/Sleepers	40	35	20
Softwood Veneer	20	20	20
Temperate Hardwood Veneer	10	10	10
Softwood Plywood	93	103	106
Temperate Hardwood Plywood	493	511	510
Particleboard	657	671	610

^{1/} Preliminary.

JAPAN: FORESTRY SITUATION

Current projections of Japan's forestry output illustrate the continuing trend away from domestic log production and greater emphasis on the manufacture of value-added items such as lumber and panel products. However, the export restrictions on tropical logs recently implemented throughout most of Southeast Asia appear to be gradually limiting Japan's ability to produce tropical hardwood veneer and plywood. Revised production estimates for 1988 and 1989, and forecasts for 1990 are as follows in 1,000 cubic meters:

	1988	1989	1990 1/
. HADUROW	20.020	20 515	20.500
HARVEST	30,930	30,515	30,500
Softwood Logs	17,386	17,175	17,000
Temperate Hardwood Logs	2,609	2,446	2,400
Poles, Piles, Posts, Pitprops	487	403	350
Softwood Lumber	26,500	27,067	27,435
Temperate Hardwood Lumber	1,594	1,524	1,612
Tropical Hardwood Lumber	1,985	1,890	1,953
Railroad Ties/Sleepers	59	61	55
Softwood Veneer	158	170	180
Temperate Hardwood Veneer	260	256	250
Tropical Hardwood Veneer	6,861	6,592	6,300
Softwood Plywood	188	195	205
Temperate Hardwood Plywood	276	329	300
Tropical Hardwood Plywood	6,827	6,183	6,200
Hardboard	161	150	140
Medium Density Fiberboard	214	237	270
Insulation Board	524	518	530
Particleboard	1,064	1,092	1,100

1/ Preliminary.

PERU: POULTRY PRODUCTION STAGNATES

Peru's 1990 poultry meat production is expected to total 187,000 tons, essentially unchanged from 1989 according to the U.S. agricultural attache in Lima. Prior to 1988, poultry production in Peru had shown steady growth, reaching a peak of 256,000 tons in 1987. However, deterioration of the national economy led to a sharp fall in meat demand. Also during the past 2 years, a prolonged drought cut availability of domestically produced grains, causing higher poultry feed prices. In addition, terrorist activity in the highlands has caused some production facilities to be abandoned and some to be moved to safer areas. A new Government took office in July 1990 and one of its major goals is to stop hyperinflation. If the economy stabilizes, output of poultry meat is expected to expand moderately in 1991 as its advantage of being lower priced than either red meat or fish is expected to spur consumption.

REPUBLIC OF KOREA: FORESTRY SITUATION

Korea's timber cut for 1990 is forecast at 1.5 million cubic meters (CUM), the maximum limit of the industry's annual production capacity. Although total forested area is declining, the resource base continues to expand. Trees planted during Korea's massive reforestation program are now beginning to mature. Growing stocks are currently estimated at 99 million CUM of softwoods—mainly red pine, 57 million CUM of hardwoods, and 60 million CUM of mixed species. Having successfully completed its initial goals for the industry—reforestation for beautification and erosion control, the Government is placing more emphasis on identifying economic uses for the timber that will soon be available. As the production statistics indicate, Korea is expanding down—line production of softwood and temperate hardwood lumber, particleboard, and fiberboards, and cutting back production of tropical board products that depend on imported logs. Current estimates are as follows in 1,000 cubic meters:

	1988	<u>1989</u>	1990 1/
HARVEST	1,250	1,227	1,500
Softwood Lumber	3,323	3,715	3,950
Temperate Hardwood Lumber	92	175	185
Tropical Hardwood Lumber	1,415	1,219	1,150
Tropical Hardwood Plywood	1,068	922	890
Medium-Density Fiberboard	55	88	160
Hardboard	13	12	13
Particleboard	203	271	275

1/ Preliminary.

SWEDEN: FORESTRY SITUATION

Current assessments indicate 1990 will almost mirror the production situation in Sweden a year ago. The annual cut is expected to increase for the fifth consecutive year in response to strong demand, and the conclusion of satisfactory price agreements between the industry and independent forest owners. Output of logs and the various products is projected to remain static or record only marginal increases due to critical labor shortages throughout every sector of the industry. Production estimates are as follows in 1,000 cubic meters:

	1988	1989	1990 1/
Harvest	67,100	70,000	71,300
Softwood Logs	22,300	22,300	22,300
Temperate Hardwood Logs	730	750	755
Softwood Lumber	11,031	11,251	11,300
Temperate Hardwood Lumber	368	375	377
Softwood Plywood	69	69	69
Temperate Hardwood Plywood	0	0	5
Particleboard	860	864	870

1/ Preliminary.

TAIWAN: FORESTRY SITUATION

Taiwan's domestic timber production has been trending downward for the past several years due to rising logging costs, poor access to remaining stands, and Government controls on logging for conservation and environmental reasons. The 1990 harvest is forecast to exceed the 1989 annual cut by approximately one-third. However, this is still significantly below the 1980-87 average of 522,000 cubic meters. Softwood lumber production is expected to continue to expand in line with increasing demand from the local contruction sector. However, projections indicate a further decline in lumber and panel products manufactured from temperate and tropical hardwoods given the price advantages enjoyed by imported products. Current production estimates are as follows in 1,000 cubic meters:

	1988	1989	1990 1/
HARVEST	253	164	220
Softwood Lumber	48	56	60
Temperate Hardwood Lumber	722	676	450
Tropical Hardwood Lumber	228	227	140
Temperate/Tropical Hardwood Veneer	939	929	910
Temperate/Tropical Hardwood Plywood	769	583	460
Particleboard	115	110	100

1/ Preliminary.

TUNISIA: POULTRY PRODUCTION EXCEEDS NEEDS

Tunisian poultry meat and egg production in 1989 was 47,800 tons and 1.03 billion eggs respectively, roughly the levels of domestic consumption. Output of both products is currently well above domestic demand as the Tunisian market adjusts to the impact of an unexpected 20 percent increase in the number of laying hens. Tunisia started 1990 with a contract to deliver 1 million 16-to-18-week old pullets to Algeria during the January-April period. Algeria refused to accept deliver of about three-fourths of the pullets because Algerian officials said they did not meet specifications. The extra layers have resulted in in surplus egg production of about 12 million eggs per month and as culling takes place are also pushing the poultry meat market into surplus.

WORLD: SUGAR PRODUCTION REVISED UPWARD

World 1990/91 centrifugal sugar production has been revised upward to 108.7 million tons (raw basis), 1.5 million tons more than forecast in May 1990. This compares with the estimated 107.9 million ton 1989/90 outturn, revised up by 1.6 million tons. Among several major increases for 1990/91 since the May report are, 1 million tons for India to 12.50 million, 250,000 tons for China to 5.85 million, and 200,000 tons for Turkey to 1.55 million. Sugar prospects for 1990/91 also improved in the European Community, up 440,000 tons since the May report to 15.85 million. Partially offsetting the increases are countries where prospects have diminished since the May report, Mexico down 250,000 tons to 3.15 million, the Dominican Republic down 130,000 tons to 650,000, and Czechoslovakia down 100,000 tons to 700,000.

FEATURE COMMODITY ARTICLES

PAKISTAN COTTON PRODUCTION AND OUTLOOK

OVERVIEW

Cotton production in Pakistan has experienced spectacular growth in the past several years, boosting its position as the country's leading agricultural export commodity. Pakistan is currently the world's fifth largest cotton producer, accounting for 8 percent of world production and harvested area. Currently the 1990/91 cotton crop is estimated at a record 6.9 million 480-pound bales, from a record harvested area of 2.6 million hectares.

Cotton is produced mostly in the Indus River Basin between latitudes 23 degrees and 33 degrees north. This area is about 1,000 kilometers in length and 300 kilometers in width. The climate in this large region is typically semi-arid, with high daily temperatures during the cotton growing season. The exception is a small, coastal area which has a maritime climate. Annual rainfall is about 10 to 12 inches, occurring mainly during the monsoon season of mid-June to mid-September. Production is totally irrigated, since rainfall accounts for less than half the crop's requirement to mature with minimum acceptable yield. Over two-thirds of the cotton area is located in the northern province of Punjab while most of the balance is produced in the southern province of Sind. In the Punjab, cotton is planted in May and flowers in July. Extreme temperatures during July, however, often cause significant flower shedding. This delays normal boll formation until September, with the full boll load reached by the second week in October. Harvesting operations in the Punjab usually begin during late October, continuing into January. Planting operations in southern Sind Province begin earlier than the Punjab, usually starting in mid-April, with harvesting commencing in August. The Sind cotton region effectively avoids the July temperature problem which usually impacts the Punjab crop, by flowering and setting bolls at an earlier date.

COTTON AREA

Seed cotton prices for the 1989/90 crop were quite strong at harvest, and were expected to influence planted area in the current season. Cotton area in 1990/91 is estimated at a record 2.64 million hectares, however the increase is only slightly above the 1989/90 level of 2.60 million. Any movement toward significant cotton area expansion was offset by a lack of available land in the heavily cultivated heartland of the Punjab, as well as ethnic disturbances in Sind. In both regions, farmers are expected to focus attention on improving crop management, and thereby raise production through higher crop yields.

COTTON YIELDS

Cotton yields in Pakistan are limited by poor crop management, including inadequate fertilizer and pesticide application. Weather anomalies also impact yields, with flooding damage from heavy rains occurring regularly along the length of the Indus river floodplain. Monsoon weather has been favorable during the current 1990/91 growing season, but seed quality at planting was poor and will likely effect yield. Much of the 1989/90 cottonseed crop in Punjab was excessively wet due to heavy rains during harvest and was further damaged by excessive heat during ginning. The result was that nearly half of the seed supply in the Punjab for planting the current cotton crop had a germination rate of only 10-50 percent. This compares to the usual 90 percent. Due to the high returns expected from the 1990/91 crop, farmers with poor initial crop stands reportedly offset this problem by re-seeding as new seed became available.

A general improvement in cotton yields has been achieved during the last several years as a result of increased use of high-yielding cotton varieties, improved cultural practices, adequate fertilizer supplies, and plant protection measures (timely application of pesticides). However, many serious problems still persist due to inefficient resource management, including weak extension services, inadequate availability of credit, planting of uncertified seed, worsening soil salinity problems, and dependence on pesticides to control insects.

PRODUCTION COST

Pakistani government analysis concerning the relative cost of production for cotton cultivation indicates that overall costs to growers will rise between 16-24 percent in 1990/91. This is reportedly due to rising costs of cotton production inputs, and energy for irrigation. Similar estimates for the 1989/90 growing season showed a comparatively small increase in production cost of 5-7 percent.

Strong domestic cotton demand and relatively high market prices for cotton lint during the past 2 seasons are being driven by the rapidly expanding textile industry. The rising market prices for raw cotton have effectively offset the significant increase in cotton production costs for growers during the current year. Reportedly, grower returns from the 1989/90 cotton crop exceeded the returns for all competitor crops in the main growing region of Punjab, and all crops except sugarcane in the Sind. Farmer satisfaction with the current pricing situation is expected to maintain the strong emphasis on cotton cultivation during 1990/91.

PRODUCTION POLICY

Pakistan's cotton production policy normally centers on the annual price support levels set by the Pakistan Central Cotton Committee. In past years, price support levels in the form of minimum procurement prices have been calculated according to the estimated annual rise in growers' production costs. Presently, these costs have been offset by the rapid rise in the market price for cotton. The government's procurement price support, therefore, began to have little impact on the development of the cotton and cotton textile sector.

In announcing the 1990/91 season support prices, the government decided to send growers and industry a strong message of continued interest in the expansion of the cotton sector. Price supports were therefore boosted beyond the normal production cost calculation, to include a cushion which would close the gap between market prices and government procurement price levels.

For example, it is estimated that the 1990/91 cost of production will be Rupees 162-215 per 40 kgs., while the support prices will range from Rs.220-260 per 40 kgs. Meanwhile, the bulk of the crop will be eligible for the support prices in the Rs.245-260 per 40 kgs. range. Officials view this price increase as an important signal and incentive for cotton production, and support for the continued expansion of the textile industry. The lint support prices for 1990/91 will be announced closer to the harvest.

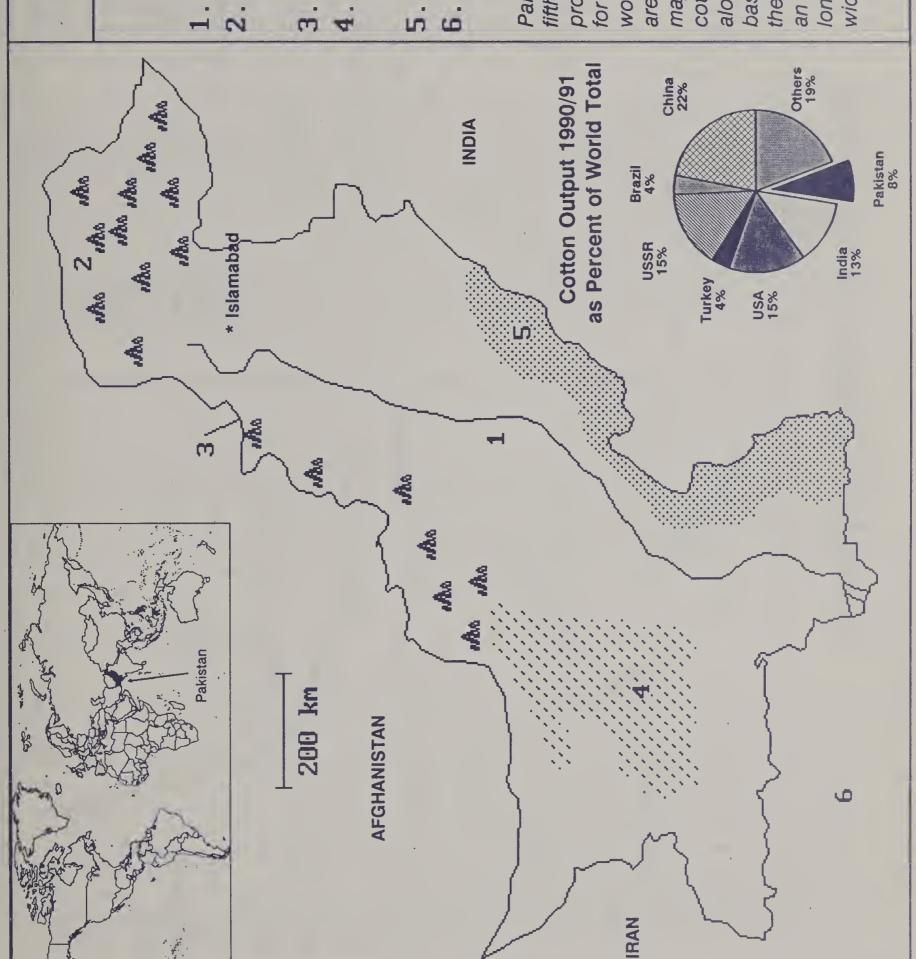
OUTLOOK

The current cotton growing season has been generally favorable, in that monsoon activity has precluded serious rainfall deficiencies or major flooding episodes. Heavy rains in southern Sind Province during harvest in August, however, was reported to have negatively impacted the crop. Quality reductions from moisture damaged lint, as well as increased worm infestations were reported. Meanwhile, the Pakistan Central Cotton Committee forecast a reduction in output of nearly 20,000 bales in Sind this year, from 1989/90 levels of 1.07 million bales. Pakistani government estimates in late August, however, indicated national cotton production should match the 1990/91 target level of 7.1 million bales. Currently, USDA is estimating a crop of 6.9 million bales.

For the near future, the cotton production outlook in Pakistan should remain strong. Annual output will likely continue to be primarily influenced by farmer satisfaction with cotton returns and the overall role that cotton plays in garnering foreign exchange as the country's primary export commodity. Production increases will come largely through achieving higher yields from improved varieties and better agronomic practices. Pakistan's medium-staple cotton varieties have improved over the last several years, particularly with respect to strength, uniformity, and maturity.

Ronald R. Roberson (202)382-8879 Michael Shean (202)475-5135

Production Estimates & Crop Assessment Division, FAS, USDA



PAKISTAN

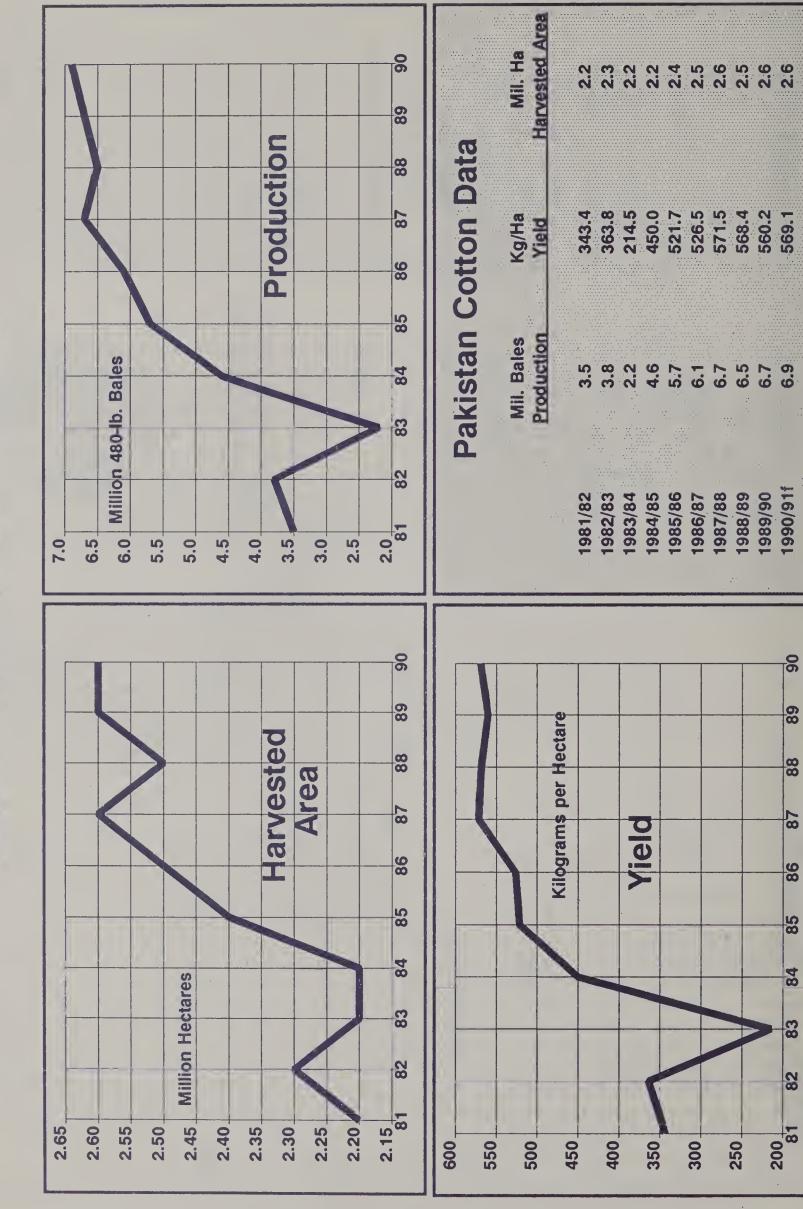
FEATURES

- Indus River Hindu Kush Mountains
- Khyber Pass
- Baluchistan Plateau
- Arabian Sea Thar Desert

an area 1,000 kilometers the map) and occupies long by 300 kilometers Pakistan is the world's basin (feature no. 1 on major land area under cotton production lies producer, accounting world production and area harvested. The along the Indus river for 8 percent of total fifth largest cotton

September 1990

Pakistan Cotton Production



INDIA OILSEED PRODUCTION OVERVIEW

The oilseed sector of the Indian agricultural economy is dwarfed by the predominant foodgrain sector, but is receiving significant attention from agricultural officials intent on revitalizing this perpetually unreliable element of the nation's agricultural system. Oilseeds production, including cottonseed, accounts for roughly 14 percent of the country's total cultivated area, compared to foodgrains 72 percent share. However, as of 1987 only 19 percent of the total oilseed area was irrigated, leaving these important crops vulnerable to erratic rainfall. The underlying weakness in the oilseed sector, due to the unreliable supply of oilseeds, has led to a significant focus by the government on research and development into new varieties and improved agronomic practices.

Oilseeds in India are important primarily because of their contribution to the nation's edible oil supply, which has fluctuated considerably in the past. Oilseeds also are important commercial crops used in the manufacturing of soaps, paints, lubricants, textiles, and pharmaceuticals, etc.; oilcakes and oilseed meals contribute to livestock feed and crop manures. The bulk of India's vegetable oil production is derived from nine oilseeds, of which USDA monitors six. Edible oilseed crops include peanut, rapeseed/mustard, sesame, safflower, nigerseed, soybean, and sunflower. Important non-edible oilseeds include flaxseed and castorseed. In addition, cottonseed, rice bran, and seed from several tree species are exploited. This report will focus on those primary oilseeds which USDA evaluates, including peanut, rapeseed, soybean, sunflower, cottonseed, and flaxseed.

Total oilseed production in 1989/90 was a bumper 18.9 million tons, down 0.4 million or 3 percent from the record 19.3 million ton crop harvested in 1988/89. Current estimates for 1990/91 show a further decline of 0.4 million tons to 18.5 million tons due to a particularly poor rainfall affecting peanuts in Gujarat and Andhra Pradesh states. Prior to the record 1988/89 season, which was fueled primarily by an ideally consistent monsoon across India, total oilseeds output hovered around 14.0 million tons. In spite of recent oilseed crop achievements, average yields are low in world standards. Although India ranks first in the world in peanut production, second in rapeseed, and third in cottonseed, it remains unable to meet rising domestic demand for oilseeds and vegetable oils.

PRODUCTION ENVIRONMENT

Oilseeds are grown over a vast area of the Indian Subcontinent and are cultivated on an average of 23.0 million hectares annually. Cultivation is split into two basic growing seasons, the main summer "kharif" season followed by the winter "rabi" season. The kharif period coincides with the annual southwest monsoon, and is characteristically the primary production period. Wide fluctuations in both spatial and temporal rainfall occur each year, and typically some sector of the oilseed growing region is left deficient. Most commonly, the moisture sensitive peanut heartland in western Gujarat state is affected by erratic monsoon showers. The rabi growing period coincides with the annual winter dry season. Rabi oilseeds generally rely on soil moisture reserves accumulated from the summer monsoon, and are supplementally irrigated. Kharif oilseeds include peanut, soybean, sunflower, and cottonseed. Rabi oilseeds include rapeseed, peanut, cottonseed, and flaxseed.

The oilseed sector is primarily composed of the peanut, rapeseed, and cottonseed crops, which in combination account for more than 80 percent of total area and production. The annual outlook for oilseed and vegetable oil supplies, however, normally hinges on the condition of the peanut harvest. Peanut production dominates the oilseed economy, and historically has proven to be the most unstable oilseed crop. For example, in 1987/88 peanut production suffered from severe drought, reaching only 5.9 million tons. The following crop season in 1988/89, India had a record peanut harvest of 9.0 million tons, or an increase of 53 percent. Meanwhile, the national oilseed crop rose from 14.7 million tons in 1987/88 to a record 19.3 million in 1988/89.

USDA 1990/91 Oilseed Statistics

Oilseed:	Area (MHa)	% of Total	Production (MMT)	% of Total	Irrigated Area (%)	Yield (5YR Avg)
Peanut Cottonseed Rapeseed Soybean Sunflower Flaxseed	7.8 7.8 4.7 2.0 1.2 1.2	31.5 31.5 19.0 8.1 4.9 4.9	7.3 4.4 3.8 1.8 0.5 0.4	40.0 24.2 20.8 9.9 2.7 2.2	15.4 30.9 55.0 	0.89 0.50 0.77 0.76 0.40 0.30

In general, oilseeds are cultivated under a host of negative conditions in India, including:

- o roughly 81 percent of total oilseed area is rainfed and rainfall is commonly erratic during critical growth periods;
- o cultivation occurs primarily on poor to sub-marginal farmland with generally low fertility;
- o pests and disease cause considerable losses;
- o most oilseed growers farm less than 2 hectares, with little ability to invest in crop inputs/pesticides;
- o fertilizer usage for oilseeds is low;
- o production, distribution, and use of quality seed is limited;
- o oilseeds are generally grown under poor management conditions;
- o farm credit has been historically deficient;
- o nationally, there has been an inadequate supply of crop inputs, extension and marketing services, and post-harvest storage facilities.

OILSEED RESEARCH

Although India is the third largest producer of oilseeds in the world, it has one of the lowest per capita consumption rates of vegetable oils, amounting to 6.5 kg/year or less than half the world average. Demand for edible oil and oilmeal products, as well as industrial usage for oilseeds is increasing along with population and rising standard of living in India. Oilseed output has fallen behind, despite an average annual growth rate near 4 percent over the past 20 years. At present the gap is being filled with edible oil imports, predominantly palm oil from Southest Asia.

Continuing large imports of edible oils are depleting the country's foreign exchange reserves. This situation has fueled the need for additional research and development regarding oilseed cultivation.

Historically, oilseed output was raised by increasing sown area. This policy was implemented by the Indian government from the Independence period of 1947 until the early 1960's. The consequence of significant oilseed area expansion during that era, however, was larger annual fluctuation in output, due to reliance on marginal and sub-marginal farmland. Oilseed crops were not supported in the same fashion as foodgrains in India, a semi-arid country that experienced periodic famine. During the early 1960's, as oilseed consumption began to seriously outstrip domestic supply, the government resorted to costly imports to match annual requirements. At this time of India's "green revolution," agricultural research was highly focused on the primary grain crops of wheat and rice. Due to the eventual progress of this research movement, a similar focus regarding oilseeds was begun in the late 1960's.

Recognition of the need for oilseed research and development led to the formation of the All India Coordinated Research Project on Oilseeds (AICORPO) in 1967. Research emphasis until recently has focused on peanut and rapeseed, the two most important edible oilseeds. Current efforts are also under way regarding the promising non-traditional oilseeds of sunflower and soybean. Research efforts since 1967 have yielded new oilseed varieties, cropping systems information, and improved agronomic management recommendations. Transferral of the knowledge and new technology to the majority of small farmers, however, has been insufficient and remains a major weakness in the effort. More importantly, the failure to bring a significantly larger percentage of oilseed crop area under irrigation has been the largest barrier to improved production. Indian research has shown that yield improvements of 200-400 percent are attainable with current farm technology, if oilseeds are irrigated.

OILSEED POLICY

The long term policy of the government is to raise oilseed output to self-sufficiency by the year 2000. Government projections indicate that gross oilseed production must rise to 26.0 million tons by that date, from an Indian Government forecast level of 16.5 to 17.5 million in 1990. Without factoring in cottonseed production, oilseed output must rise to over 21.0 million tons from the current average annual level of 12.0 million tons over the next 10 years to meet projected demand.

Government programs introduced since 1979 have contributed to the improving oilseeds production potential in India, and have primarily benefited peanut and rapeseed. Annual government support for oilseed cultivation includes subsidized seed, fertilizer, pesticides, and irrigation equipment. Assistance to private sector breeder seed producers also was initiated to increase output and availability of quality hybrid seed. Market support for farmers in the form of stable oilseed procurement prices, as well as additional credit to marginal farmers also was implemented. Government support programs are estimated to cover virtually 78 percent of total oilseed area, with special focus on peanuts.

Despite this commitment to oilseeds development, the production environment continues to be plagued by its susceptibility to adverse weather. This weakness was evident in the inability of these programs to prevent the huge shortfall in peanut output, or total oilseeds production, during the 1987/88 drought. The rebound to record production levels for oilseeds, including peanut, during the 1988/89 season appears to be attributed to the ideal monsoon performance across the entire subcontinent.

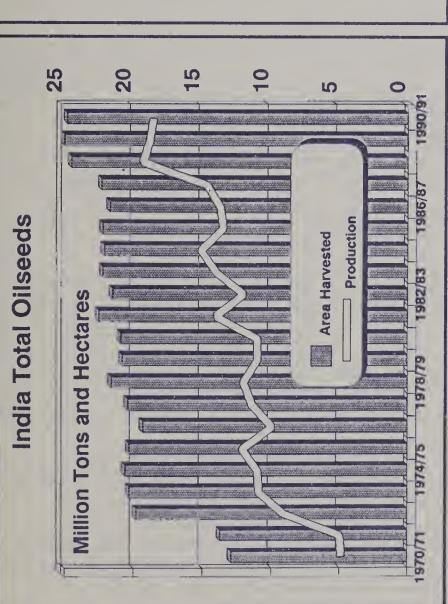
CURRENT CROP SITUATION

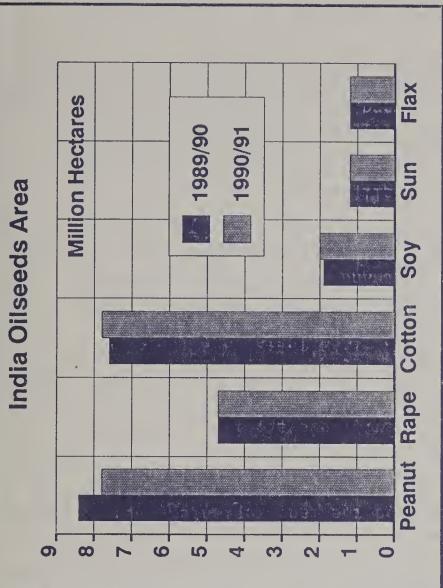
Before the beginning of the monsoon in June 1990, procurement prices for oilseeds were raised 8-16 percent from last year's levels, with peanuts receiving the highest increase. Market prices were well above those of 1989/90 at planting, and have since reached record highs on the Bombay market in August.

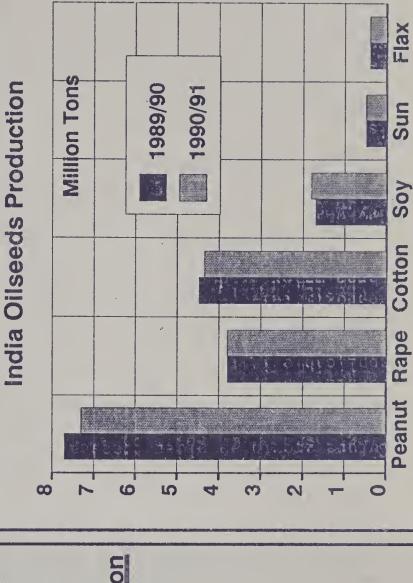
The monsoon season has seen a serious shortfall of moisture in two primary peanut growing areas, Gujarat and Andhra Pradesh. August rainfall has been heavy in Gujarat, and may further damage an already reduced crop. Substantial losses of planted area have already been reported in the Saurashtra peanut bowl of Gujarat prior to the recent storms. As the kharif peanut crop progresses through pod-filling stages in September, moisture requirements are greatest. For other summer oilseeds, including soybean, sunflower, and cottonseed, the monsoon has performed favorably. Indications are that output will match or exceed early season estimates for these minor oilseeds. Current USDA estimates reflect a significant decline in kharif peanut output, with total oilseed production forecast at 18.5 million tons, down 400,000 tons from last year.

Michael Shean (202)475-5135

Production Estimates & Crop Assessment Division, FAS, USDA







Peanut Rapeseed Cottonseed Soybean Sunflower		Oilseed Situation Million Hectares and Tons Area Production Area 8.4 7.7 7.8 4.7 3.8 4.7 4.7 3.8 4.7 4.7 4.5 7.8 1.9 1.7 2.0 1.2 0.5 1.2	Area 7.8 4.7 7.8 7.8 2.0 1.2	ns 1990/91 Productio 7.3 3.8 4.4 1.8
Flaxseed	7.	0.4	1.2	0.4
Total	25.0	18.6	24.7	18.2

WORLD RED MEAT PRODUCTION

World red meat production for 1990 is projected at 114.5 million tons, down slightly from the March forecast and down less than 1 percent from 1989. Since March the beef production has been reduced, while pork and sheep/goat meat production forecasts have been increased. In 1991, red meat production is projected to recover to slightly above 1989 levels with pork showing the largest absolute growth and sheep/goat meat gaining the most in percentage terms. World cattle numbers fell slightly during 1989, but hog and sheep numbers increased.

World	Red Meat Prod	uction in	Millions March	of Tons Sept.	Forecast
	1988	1989	1990	1990	1991
Beef and Veal Pork Sheep and Goat Meat	45.3 62.3 5.8	45.6 63.6 6.0	45.9 62.7 6.0	45.1 63.2 6.2	45.6 64.2 6.3
Total	113.4	115.2	114.6	114.5	116.1

World 1990 beef and veal production is projected at 45.1 million tons, down 1 percent from the record high in 1989. Slaughter is forecast down marginally enabling a slight increase in the world cattle population by the end of 1990. In 1991 beef/veal production is forecast to increase slightly. Herd rebuilding, in the United States which started in 1989, is continuing this year. Consequently, U.S. beef production is projected to fall over 1 percent this year with cattle slaughter at a 25-year low. For 1991, production is projected up 1 percent. In Mexico, drought and economic problems have caused heavy herd culling to continue. Cattle numbers fell 9 percent during 1989 and a 5-percent drop is expected this year. Beef production rose sharply in 1989 due to heavy herd culling. Beef production for 1990 is projected down 14 percent due to reduced supplies of slaughter cattle. Argentina's beef production is estimated down 3 percent this year and a further 1-percent reduction is expected in 1991. Total cattle numbers fell 0.3 million head to 50.6 million in 1989 with some recovery expected this year. This is due to better pasture conditions and rancher reluctance to sell cattle for the low prices that have resulted from the current recession.

EC beef production is projected to be up almost 2 percent this year, and rise another 1 percent in 1991. Cattle numbers have stabilized, with only a slight decline during 1989 and a marginal gain is expected this year. Current EC cattle prices are between 10 and 14 percent below last year's level and large intervention purchases are expected. Soviet beef production was up sharply in 1988 and 1989 partly as a result of herd culling which has continued. Beef production for both 1990 and 1991 is projected down slightly because of reduced slaughter cattle supplies.

Australian cattle numbers are expected to increase 2 percent this year after a growth of 3 percent in 1989. The slower increase is expected because of a drought which ended with floods in March and April. Beef production is projected up nearly 7 percent due to increased slaughter caused by the weather problems. Beef production in 1991 is projected down almost 3 percent as herd rebuilding regains momentum. Falling wool and grain prices are easing competition for production resources in mixed-farming areas.

World 1990 pork production is estimated at 63.2 million tons, down 0.3 million tons from 1989. This follows a 1.3 million ton increase in 1989. For 1991 production should return to slightly above 1989 levels. World hog numbers are expected to increase slightly this year after a 1-percent gain in 1989. U.S. pork production for 1990 is estimated down over 2 percent, but production for 1991 is forecast up over 3 percent based on the expectation of higher hog prices. Drought and economic problems are causing Mexican pork production to fall an estimated 13 percent in 1990 with little additional change expected in 1991.

EC pork production is projected to fall slightly in 1990 largely because of an 11-percent drop in Belgian production resulting from an outbreak of hog cholera. This is the first drop in EC production in more than 10 years. For 1991 production is forecast up about 200,000 tons. East European 1990 pork production is projected down over 7 percent due to the economic dislocations caused by last year's changes in government. The largest drop in Eastern European pork production is expected in East Germany where adjustments for the coming re-unification with West Germany are slashing production by 20 percent. In 1991 East European production is forecast to post a 1-percent gain. However, East German production is expected to remain depressed in 1991. Soviet hog numbers were up less than 1 percent at the start of 1990 and a smaller increase is forecast for 1991. For 1990 pork production is estimated up more than 1 percent with no change expected next year. Growth in Chinese pork production is reported to be slowing due to limited feed supplies. Chinese hog numbers are expected to decline this year after several years of steady gains.

World 1990 sheep and goat meat production is estimated at 6.2 million tons, up about 3 percent from last year's level. Production is forecast to increase another 3 percent in 1991. World sheep numbers are expected to increase 2 percent during the current year after a 2 percent gain in 1989. Most of the 1990 growth in meat production is due to higher slaughter in China and Australia. Australian production is estimated up 14 percent because of heavy culling of older sheep in response to falling wool prices. As a result, Australian inventory numbers are expected to drop slightly during 1990 after a 7 percent expansion in 1989. This is likely to permit 1991 sheep meat production to rise a further 5 percent. New Zealand's sheep numbers were down 6 percent on June 30, 1990 (the start of the marketing year) and are forecast to fall a further 4 percent next year. Drought in 1989 was a major factor, but weak mutton sales and falling wool prices are the reasons for the expected herd reductions in 1990. Wool has become a more important factor in New Zealand's sheep industry in recent years. Sheep meat production for 1990 is projected down 14 percent because of lower slaughter lamb supplies and reduced adult slaughter which was high last year due to drought. For 1991 production is forecast to be up slightly.

Arthur Hausamann (202) 382-8883

TABLE 9

BEEF AND VEAL PRODUCTION, SELECTED COUNTRIES
(1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

	1988	1989	1990	Forecast 1991
Canada Mexico United States NORTH AMERICA	973 1,754 10,880 13,607		10,484	10,604
Costa Rica Dominican Republic El Salvador Guatemala Honduras Panama CENTRAL AMERICA & CARIB.	86 61 23 61 33 57 321	81 60 27 61 34 57 320	82 51 28 59 34 57 311	85 52 29 60 35 57 318
Argentina Brazil Colombia Uruguay Venezuela SOUTH AMERICA	2,610 2,448 707 321 307 6,393	2,600 2,296 741 347 337 6,321	2,150 753 315	2,280 762 315 360
Belgium/Luxembourg Denmark France Germany, Fed. Rep. Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	323 217 1,780 1,609 82 458 1,164 506 111 450 945 7,645	312 205 1,670 1,575 82 431 1,140 485 120 451 980 7,451		330 200 1,720 1,620 80 507 1,130 465 125 450 1,018 7,645

TABLE 9

CONTINUED
BEEF AND VEAL PRODUCTION, SELECTED COUNTRIES
(1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

	1988	1989	1990	Forecast 1991
Austria	222	213	212	214
Finland	111	107	110	108
Sweden	127	139	146	146
Switzerland	157	157	160	162
OTHER WEST EUROPE	617	616	628	630
Bulgaria	131	136	137	126
Czechoslovakia	451	488	498	483
Germany, Dem. Rep.	425	425	330	410
Hungary	93	108	101	92
Poland	783	729	702	726
Romania Yugoslavia	230 301	210	212	230
EAST EUROPE	2,414	309 2,405	308 2,288	300
			2,200	2,367
U.S.S.R.	8,600	8,800	8,700	8,700
Israel	35	39	39	39
Saudi Arabia	24	25	28	30
Turkey	245	290	310	320
MIDDLE EAST	304	354	377	389
Egypt	400	409	423	436
South Africa	553	582	670	676
AFRICA	953	991	1,093	1,112
China	958	1,025	1,180	1,250
India	550	670	670	710
Korea, South	175	124	115	118
Japan	570	548	535	560
Philippines	124	132	138	142
Taiwan ASIA	2,382	6 2,505	6 2,644	6 2,786
	2,362	2,303	2,044	2,700
Australia	1,533	1,565	1,671	1,626
New Zealand	562	550	445	430
OCEANIA	2,095	2,115	2,116	2,056
TOTAL	45,331	45,631	45,091	45,631
	=======================================			

TABLE 10

CATTLE AND BUFFALO INVENTORIES, SELECTED COUNTRIES
(THOUSAND HEAD JANUARY 1)

	1988	1989	1990	Forecast 1991
Canada	10,863	11,016	11,201	11,350
Mexico	35,378	34,999	31,747	30,046
United States	99,622	99,180	99,337	101,006
NORTH AMERICA	145,863	145,195	142,285	142,402
Costa Rica Dominican Republic El Salvador Guatemala Honduras Panama CENTRAL AMERICA & CARIB.	1,753	1,735	1,762	1,776
	2,000	1,990	1,986	1,980
	1,101	1,162	1,176	1,214
	2,550	2,100	1,900	1,695
	2,880	2,940	3,000	3,065
	1,502	1,512	1,502	1,502
	11,786	11,439	11,326	11,232
Argentina Brazil Colombia Uruguay Venezuela SOUTH AMERICA	50,782	50,782	50,582	50,782
	98,335	98,340	98,228	101,330
	18,400	17,627	16,835	16,146
	10,306	10,548	9,377	9,481
	12,756	13,095	13,210	13,615
	190,579	190,392	188,232	191,354
Belgium/Luxembourg Denmark France Germany, Fed. Rep. Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	3,159	3,174	3,277	3,300
	2,323	2,226	2,232	2,220
	21,052	20,120	19,980	19,830
	14,887	14,659	14,563	14,568
	720	723	715	720
	5,580	5,637	5,899	6,124
	8,898	8,843	8,853	8,769
	4,546	4,606	4,731	4,720
	1,332	1,359	1,343	1,316
	5,094	5,200	5,300	5,275
	11,849	11,902	11,933	12,143
	79,440	78,449	78,826	78,985

CONTINUED
CATTLE AND BUFFALO INVENTORIES, SELECTED COUNTRIES
(THOUSAND HEAD JANUARY 1)

TABLE 10

	1988	1989	1990	Forecast 1991
Austria Finland Sweden Switzerland OTHER WEST EUROPE	2,586	2,541	2,562	2,600
	1,434	1,379	1,363	1,350
	1,667	1,676	1,678	1,675
	1,808	1,850	1,848	1,851
	7,495	7,446	7,451	7,476
Bulgaria Czechoslovakia Germany, Dem. Rep. Hungary Poland Romania Yugoslavia EAST EUROPE	1,649	1,613	1,550	1,497
	5,044	5,075	5,129	5,075
	5,721	5,710	5,724	5,675
	1,664	1,690	1,598	1,590
	10,200	10,100	10,143	9,947
	7,182	6,416	6,283	6,450
	4,881	4,759	4,692	4,667
	36,341	35,363	35,119	34,901
U.S.S.R.	120,592	119,580	118,300	117,500
Israel	188	191	183	183
Saudi Arabia	281	217	191	176
Turkey	14,000	13,400	12,000	10,300
MIDDLE EAST	14,469	13,808	12,374	10,659
Egypt South Africa AFRICA	4,616	4,648	4,681	4,706
	12,187	12,675	13,398	13,578
	16,803	17,323	18,079	18,284
China India Korea, South Japan Philippines Taiwan ASIA	94,650	97,950	101,380	111,484
	264,860	269,200	272,300	275,400
	2,386	2,039	2,051	2,088
	4,667	4,682	4,760	4,880
	4,590	4,524	4,394	4,400
	172	176	165	168
	371,325	378,571	385,050	398,420
Australia New Zealand OCEANIA	23,469	23,938	24,564	24,952
	7,999	8,057	7,721	7,866
	31,468	31,995	32,285	32,818
TOTAL	1,026,161	1,029,561	1,029,327	1,044,031

PORK PRODUCTION, SELECTED COUNTRIES (1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

					FORECAST
		1988	1989	1990	1991
Canada		1,188	1,184	1,140	1,155
Mexico		964	910	792	800
United State	S	7,114	7,173	6,997	7,214
NORTH AMERICA		9,266	9,267	8,929	9,169
Brazil		1,100	950	1,050	1,100
Colombia		131	140	144	150
Dominican Re	p.	16	14	14	14
Guatemala		14 148	14 132	14 110	14 105
Venezuela CENTRAL AND SO	UTH AMERICA	1,409	1,250	1,332	1,383
Belgium/Luxe	mbourg	813	831	738	797
Denmark		1,168	1,165	1,200	1,225
France	Dan	1,599	1,840	1,870	1,880
Germany, Fed Greece	. kep.	2,838 160	2,684 151	2,680 150	2,730 150
Ireland		146	139	146	158
Italy		1,269	1,276	1,285	1,290
Netherlands		1,632	1,636	1,625	1,600
Portugal		211	216	218	219
Spain		1,722	1,722	1,730	1,780
United Kingd		1,048	981	975	1,000
EUROPEAN COMMU	NITY 	12,606	12,641	12,617	12,829
Austria		399	404	405	411
Finland		168	173	178	177
Sweden		300	308	298	283
Switzerland	ODE.	279	280	275	273
THER WEST EUR	/r c 	1,146 	1,165	1,156 	1,144
Bulgaria	•	404	424	422	400
Czechoslovak		938	960	962	962
Germany, Dem Hungary	. kep.	1,342 986	1,368 1,079	1,100 931	1,100
Poland		1,845	1,870	1,767	1,873
Romania		840	600	620	600
Yugoslavia		819	791	775	800
EAST EUROPE		7,174	7,092	6,577	6,635
J.S.S.R.		6,600	6,700	6,800	6,800
China		20,176	21,375	21,600	22,000
Hong Kong		34	30	28	27
Korea, South		433	485	522	554
Japan		1,578	1,594	1,595	1,560
Philippines		540	615	665	710
Singapore		76	75	76	77
Taiwan ASIA		911 23,748	917 25,091	990 25,476	935 25,863
 Australia		- 298	302	305	309
New Zealand		43	44	43	41
OCEANIA		341	346	348	350
TOTAL		62,290	63,552	63,235	64,173

HOG INVENTORIES, SELECTED COUNTRIES (THOUSAND HEAD JANUARY 1)

		JANUARY I		
	1988	1989	1990	FORECAST 1991
Canada	10,748	11,018	10,694	10,600
Mexico	10,879	9,003	8,563	8,593
United States	54,384	55,469	53,852	55,300
NORTH AMERICA	76,011	75,490 	73,109 	74,493
Brazil Colombia	31,700 2,458	31,700 2,500	37,500 2,525	44,675 2,525
Dominican Rep.	285	293	306	316
Guatemala	1,120	1,110	1,120	1,130
Venezuela	3,100	2,961	2,326	1,821
CENTRAL AND SOUTH AMERICA	38,663	38,564	43,777	50,467
Belgium/Luxembourg	5,958	6,306	6,551	6,200
Denmark France	9,048 11,915	9,105 11,866	9,120	9,300
Germany, Fed. Rep.	23,670	22,589	11,860 22,165	11,860 22,240
Greece	1,269	1,114	820	671
Ireland	960	961	995	1,000
Italy	9,383	9,360	9,261	9,210
Netherlands	14,226	13,820	13,634	13,500
Portugal Spain	2,450 16,941	2,326 16,100	2,247 16,910	2,023
United Kingdom	7,915	7,628	7,383	17,000 7,178
EUROPEAN COMMUNITY	103,735	101,175	100,946	100,182
Austria	3,933	3,874	3,773	3,800
Finland	1,291	1,327	1,348	1,382
Sweden	2,274	2,264	2,175	2,075
Switzerland OTHER WEST EUROPE	1,923 9,421	1,869 9,334	1,857 9,153	1,863 9,120
Oluer Me21 FOROLE	9,421	9,334 		
Bulgaria	4,034	4,134	4,270	4,288
Czechoslovakia	7,235	7,348	7,498	7,498
Germany, Dem. Rep. Hungary	12,503 8,216	12,464 8,327	12,073 7,660	10,323 8,250
Poland	19,373	20,169	18,685	19,700
Romania	15,224	14,350	11,659	13,600
Yugoslavia	8,324	7,396	7,230	7,450
EAST EUROPE	74,909	74,188 	69,075	71,109
U.S.S.R.	77,403	78,143	78,900	79,000
China	327,730	342,220	352,000	346,560
Korea, South	4,281	4,852	4,801	5,000
Japan	11,725	11,866 7,909	11,816 7,990	11,480 8,100
Philippines Taiwan	7,581 7,129	6,954	7,783	8,000
ASIA	358,446	373,801	384,390	379,140
Australia	2,719	2,766	2,765	2,850
New Zealand	426	414	380	355
OCEANIA	3,145	3,180 	3,145	3,205
TOTAL	741,733	753,875	762,495	766,716

LAMB, MUTTON, GOAT MEAT PRODUCTION, SELECTED COUNTRIES (1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

TABLE 13

(1,000 MEIRIC 10NS	CWI/CW22-	WEIGHT-EQU.	r AMPRIAT)	TODTOACT
	1988	1989	1990	FORECAST 1991
Mexico	73	75	. 76	78
United States	152	157	167	167
NORTH AMERICA	225	232	243	245
Argentina SOUTH AMERICA	87	96	99	107
Belgium/Luxembourg	7	7	7	7
Denmark	1	2	2	2
France	153	160	150	160
Germany, Fed. Rep.	30	31	33	34
Greece	123	130	129	126
Ireland	49 76	62 80	84 80	93 81
Italy Netherlands	12	13	14	14
Portugal	30	28	27	26
Spain	231	231	260	275
United Kingdom	321	368	360	370
EUROPEAN COMMUNITY	1,033	1,112	1,146	1,188
Bulgaria	89	78	- 77	70
Czechoslovakia	10	10	10	10
Germany, Dem. Rep.	19	18	9	9
Hungary	4	4	4	4
Poland	25	22	21	20
Romania Yugoslavia	60 70	72 69	.70 65	76 64
EAST EUROPE	277	273	256	253
U.S.S.R.	1000	1000	1000	1000
Egypt	52	50	55	55
South Africa	194	202	212	229
AFRICA	246 	252	267 	284
China	802	880	990	1,050
India	527	550	572	587
Korea, South	1	1	1	1
Saudi Arabia	96	95	96	
Turkey MIDDLE EAST & ASIA	385 1,811	370	355 2,014	340
HIDDRE ENSI & WOLK		1,896 	2,014	2,075
Australia	549	569	650	
New Zealand	576			
OCEANIA	1,125	1,143	1,145 	1,196
TOTAL	5,804	6,004	6,170	6,348
				========

TABLE 14

SHEEP INVENTORIES, SELECTED COUNTRIES
(THOUSAND HEAD JANUARY 1)

	1988	1989	1990	FORECAST 1991
United States NORTH AMERICA	10,945	10,858	11,368	11,500
Argentina SOUTH AMERICA	29,202	29,345	28,571	26,876
Belgium/Luxembourg Denmark France Germany, Fed. Rep. Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	160 73 10,360 1,414 10,512 4,301 11,457 1,169 3,180 20,310 27,820 90,756	. 156 86 11,500 1,464 10,694 4,991 11,623 1,405 3,187 23,797 29,045 97,948	161 100 11,500 1,533 10,400 5,782 11,695 1,500 3,024 26,200 29,521 101,416	163 120 11,550 1,531 10,185 5,775 11,735 1,550 3,051 27,400 30,691 103,751
Bulgaria Czechoslovakia Germany, Dem. Rep. Hungary Poland Romania Yugoslavia EAST EUROPE	8,886 1,087 2,656 2,336 4,075 18,900 7,824 45,764	8,609 1,087 2,634 2,216 4,300 16,210 7,564 42,620	7,797 1,087 2,603 2,069 4,196 15,442 7,603 40,797	7,118 1,087 2,443 2,130 4,100 16,500 7,650 41,028
U.S.S.R.	140,783	140,684	140,500	138,500
Egypt South Africa AFRICA	1,650 29,640 31,290	1,750 30,935 32,685	1,815 32,665 34,480	1,830 33,900 35,730
India Saudi Arabia Turkey MIDDLE EAST & ASIA	51,684 6,848 40,000 98,532	53,486 7,084 34,850 95,420	54,588 6,457 31,500 92,545	55,739 6,092 29,300 91,131
Australia New Zealand OCEANIA	162,500 64,244 226,744	174,918 64,436 239,354	187,384 60,600 247,984	186,709 58,335 245,044
TOTAL	674,016	688,914	697,661	693,560
China *	180,340	201,530	211,000	235,986
TOTAL	854,356	890,444	908,661	929,546
* Includes Costs In China				

^{*} Includes Goats In China.

WORLD TREE NUT PRODUCTION

ALMONDS: World commercial almond production is expected to increase for the second consecutive year. The 1990/91 harvest is currently forecast at a record 418,100 tons (shelled basis), 11 percent greater than a year ago, and 4 percent above the previous high recorded in 1987/88. The bulk of the increase stems from bumper crops in the United States and Italy. The U.S. crop appears in excellent condition, despite continuing drought. A good set was reported for all varieties, although kernel sizes appear slightly smaller than in 1989. Below normal temperatures late in the season slowed maturity, but the harvest is now proceeding satisfactorily. Italy's 1990/91 crop fared well throughout the growing season. No frost damage was reported and spring rains were plentiful and timely. Although production has been increasing steadily since the 1987/88 season, the long-term trend indicates a substantial reduction in future growth as older trees are uprooted and the land replanted with more profitable crops such as citrus or vegetables. The smaller crops being projected in other almond producing countries mainly reflect the normal downturn in production following excessively large crops. This pattern appears applicable in the case of Portugal and Turkey. However, in the remaining countries, inclement weather further complicated this normal biennial fluctuation. In Spain, abnormally warm winter temperatures forced the bloom approximately 3 weeks early causing an irregular set. Subsequent frosts in the three major producing areas--Catalonia/Aragon, Andalusia, and the Levant--further reduced production potential but do not appear to have significantly affected quality or kernel sizes. In Greece and Morocco, hot, dry weather adversely affected the fruit set and significantly reduced yields.

FILBERTS (HAZELNUTS): Significantly smaller filbert crops are expected in the world's three largest commercial producing countries. The total world harvest is currently forecast at 524,100 tons (inshell basis), down one-fourth from last year's record of 701,800 tons. Turkey's 1990/91 crop is projected at only 380,000 tons, 27 percent below the record 1989/90 volume. The Government's recent regulation limiting the areas where filbert groves can be established seems to have slowed the rate of plantings and stabilized total area at just under 340,000 hectares. It will be a long time, however, before this measure will significantly curtail excess production and lower support price expenditures. In the short-term, rising production costs and the surpluses accumulated from the previous two large crops will continue to erode producer prices. After two consecutive years of bumper crops, Italian filbert production is expected to drop 29 percent to 100,000 tons. The decline reflects both the natural inclination of filbert trees to produce fewer buds the season following a large set, as well as actual bud loss due to strong winds during pollination. Despite drought in the early part of 1990, abundant spring rains appear to have salvaged Spain's 1990/91 filbert crop. Production is currently forecast at 25,000 tons, down 17 percent from last season but approximately equal to the previous 5-year average. The crop is reportedly of good quality and comprised of normal to large-sized nuts. The United States is the world's only commercial filbert producer this season with growing conditions amenable to the production of a bumper crop. Current assessments indicate U.S. output will total 19,100 tons, an increase of 62 percent over last year's freeze-damaged crop, and potentially the third largest outturn to date.

PISTACHIOS: Pistachios exhibit the widest fluctuations in the alternate bearing cycle of any tree nut. Even though the 1990/91 season is an off-year in the cycle for all commercial producers except the United States and Syria, production is forecast at an all time high of 80,500 tons, 17 percent above the 1989/90 level. The U.S. crop is currently projected at a record 52,200 tons. This is nearly three times greater than last year's crop, and 22 percent above the previous high recorded during the 1988/89 season. Besides the boost provided by the alternate bearing tendency, a 6-percent expansion in bearing area and a 25-percent increase in the total number of clusters per tree contributed to the bumper crop. Syria has been experiencing significant production gains for the past several years. Increased productivity from mature trees and additional trees reaching bearing age are expected to boost output during the 1990/91 season to a record 20,000 tons. Italy is experiencing a normal off-year yield downturn, but pistachio crops in Greece and Turkey are expected to be smaller than a year ago due to excessively dry weather throughout the growing season.

WALNUTS: World commercial walnut production during the 1990/91 season is forecast at a record 521,100 tons (inshell basis), 6 percent above a year ago. The U.S. crop, currently pegged at 204,100 tons, is down 2 percent from last year. Hot, dry weather continues to plague California's walnut growing areas and has caused extensive sunburning. Drought induced yield reductions negated any gains that normally would have been derived from this season's increase in bearing area and good nut set. Current projections indicate walnut production in China will reach a new high of 190,000 tons, 19 percent above last season's record off-year crop of 160,100 tons. Although weather and soil moisture conditions were extremely favorable, most of the increase can be attributed to additional trees reaching bearing age and improved yields from mature trees. Further expansion of China's walnut industry is inevitable, given the ongoing support provided by all levels of Government. The Ministry of Forestry, as well as provincial and county Forestry Bureaus, view increased walnut production as a means to increase producer incomes while solving the problem of massive soil erosion. Assistance by the Ministry of Forestry includes the development of early-maturing "super" varieties, on-site instruction in the use of improved cultivation methods, and the establishment of experimental breeding stations that provide growers grafted seedlings of the new "super" varieties at subsidized prices. In contrast, the Turkish Government has no specific policy regarding walnuts nor does it provide any kind of production or financial assistance to the industry. Therefore, it is not surprising that production has been trending downward since the late 1970's. Although the projected 1990/91 crop of 63,000 tons indicates a gain of 2 percent over last season, this merely reflects the normal cyclical increase in an on-year. The long-term trend is for further retraction of the industry, as strong domestic prices for walnut lumber encourage a high rate of cutting. At an estimated 26,000 tons, French walnut production during the 1990/91 season is only marginally below the 1989/90 volume. Average nut sizes are reportedly bigger than a year ago, but crop quality is only fair due to a high incidence of bacterial disease in the important southwest growing region. India's walnut crop is currently forecast at 20,000 tons, 18 percent above last season's weather-damaged harvest, but 13 percent short of the record volume harvested during the 1986/87 season. The increase reflects favorable growing conditions during the blossom and fruit formation stages, an increase in the number of bearing trees, and the absence of disease and pest problems. Preliminary forecasts place the 1990/91 Italian walnut crop at 18,000 tons, unchanged from last year's level due to generally favorable growing conditions. Long-term projections indicate future production declines are inevitable, as more and more trees are exploited for their lumber value and not replaced.

WORLD TREE NUT PRODUCTION
(1,000 Metric Tons)

ALMONDS, SHELLED	1986/87	1987/88	1988/89	1989/90	1990/91 1/
Greece Italy Morocco Portugal	14.8 17.0 7.1 3.2	8.5 12.0 6.3 2.7	19.0 14.0 7.4 0.9	17.2 18.0 11.1 3.5	14.0 22.0 9.0 3.0
Spain	50.0 12.0	65.0 10.0	40.0 14.0	90.0 15.0	60.0
Turkey United States	113.4	299.4	267.6	222.3	297.1
Total	217.5	403.9	362.9	377.1	418.1
FILBERTS, INSHELL	1986/87	1987/88	1988/89	1989/90	1990/91 1/
Italy Spain Turkey United States	90.0 19.0 300.0 13.7	90.0 32.0 280.0 19.8	140.0 17.5 410.0 15.0	140.0 30.0 520.0 11.8	100.0 25.0 380.0 19.1
Total	422.7	421.8	582.5	701.8	524.1
PISTACHIOS, INSHELL	1986/87	1987/88	1988/89	1989/90	1990/91 1/
Greece Italy Syria Turkey United States	2.3 0.3 14.3 20.0 34.0	4.0 4.0 12.5 25.0 15.0	3.0 0.3 17.9 15.0 42.6	4.9 3.3 18.0 25.0 17.7	3.0 0.3 20.0 5.0 52.2
Total	70.9	60.5	78.8	68.9	80.5

Note: Iran is excluded from this report due to lack of current, verifiable information.

WALNUTS, INSHELL	1986/87	1987/88	1988/89	1989/90	1990/91 1/
China	115.0	147.0	177.1	160.1	190.0
France	. 27.9	26.5	21.5	26.2	26.0
India	23.0	20.0	18.0	17.0	20.0
Italy	12.0	20.0	11.0	18.0	18.0
Turkey	68.0	65.0	64.0	62.0	63.0
United States	163.3	224.1	189.6	207.8	204.1
Total	409.2	502.6	481.2	491.1	521.1

^{1/} Preliminary.

September 1990

Production Estimates and Crop Assessment Division

EC 12 OILSEED PRODUCTION OUTLOOK

Total European Community (EC) oilseed production for the 1990/91 marketing year is projected to be a record 12.8 million tons, after 2 consecutive years of decline. This will be an increase of 17 percent from an estimated 11.0 million tons produced during 1989/90 and 3 percent over the old record of 12.4 million set in 1987/88. Even under a support price regime that is intended to stabilize the production of oilseeds—through support price reductions for output over a specified maximum level—total output continues to grow along the trend established throughout the early and mid-1980's.

With the adoption of the Maximum Guaranteed Quantity (MGQ) scheme of price support outlays, the Community expected to curtail total oilseeds production to financially manageable levels, while providing income parity between the farm and industrial sectors. These dual objectives have not been accomplished under the present support regime however, since price supports remain sufficiently high to encourage continued production increases. This is not to indicate that farm income has been unaffected. With the adoption of the MGQ, farm returns have become more volatile as annual support prices are unknown until the final harvest is officially determined. For example, prices dropped for the record crop of 1987. During the next 2 years production dropped toward the level of the MGQ but sent mixed signals to producers since adjusted support prices actually increased in response to the declining margin between actual output and the MGQ output level.

This year's record crop will trigger significant MGQ support price adjustments. Sunflower producers are estimate to receive the largest support price reduction—nearly 25 percent off the maximum target price—while rapeseed and soybean support prices are expected to be adjusted down by 14 and 25 percent, respectively. The three major EC oilseeds (rapeseed, soybean, and sunflowerseed) are estimate to increase harvested area over 1989/90, but none are expected to exhibit record yields. Hot, dry summer weather, particularly in France and Spain, is expected to reduce average yields for sunflowerseed while winter drought cut rapeseed yields. This year's significant sunflower area increase is mainly due to farmers switching from grain crops to more drought—tolerant sunflowers—a natural alternative precipitated by the winter drought conditions that persisted into the spring planting period.

Production Outlook for 1990/91

Rapeseed: EC-12 rapeseed production is estimated to be the second largest on record at 5.8 million tons, up 0.9 million or 18 percent from last year. Rapeseed production accounts for 45 percent of total EC oilseed production and has increased 49 percent from 1985. Harvest area is estimated higher this year for France, the United Kingdom, West Germany, and Denmark. France remains the largest rapeseed producer in the EC with nearly 35 percent of the total rapeseed area, followed by West Germany with 29 percent, the United Kingdom with 20 percent, and Denmark with 13 percent. The West Germans have shown an increasing interest in rapeseed, this year planting an additional 33 percent over last season.

Although faced with drought in the fall of 1989, French farmers planted slightly more area to rapeseed than last year and above the 5 year average. During 1987/88 and 1988/89, rapeseed area fell due primarily to rotation requirements with winter grains. For many producers, rapeseed rotation is necessary to boost grain yields on marginal soil to profitable levels. This season the French are expected to harvest an estimated 0.7 million hectares, with production pegged at 1.9 million tons. In addition to the rotation requirements, French producers were encouraged by rising support prices that reflected reduced total EC output over the rapeseed MGQ during 1988/89 and 1989/90.

In West Germany, production has been stimulated by the high rapeseed support price in relation to other crops and new varieties with high yield potential. Interest in rapeseed was further stimulated by excellent farm returns caused by the drop in total EC rapeseed—due to French rotation—and the compulsory upward adjustment of the support price at a time when West German area was increasing. West Germany is expected to harvest a record 0.6 million hectares of rapeseed in 1990/91 and produce an estimated 1.9 million tons. While West Germany follows France in rapeseed area in the EC, rising area and superior average yields have combined to compete with France, for the first time, in production. They are virtually at a tie for the world's fourth largest rapeseed producer after China, India, and Canada.

After a year in which the impact of a short seed supply dominated the oilseed sector in the United Kingdom, harvested rapeseed area in 1990/91 is expected to reach 0.4 million hectares, 23 percent higher than their 5-year average. In anticipation of another year of high rapeseed prices and relatively low grain prices in 1990, all regions reported an increase in rapeseed planting. Production is projected to be a disappointing 1.2 million tons however, as poor weather conditions are expected to keep yields below the 5-year average.

A slight expansion is expected in Danish rapeseed area in 1990/91 due to crop rotation requirements. Harvested area is pegged at 250,000 hectares, up 8 percent from last season and equal to the record set in 1987/88. Production is estimated to reach a record 750,000 tons. A shift to higher yielding winter grown varieties is ongoing and is expected to continue at a modest rate.

Double-low varieties ("00") make up the bulk of the rapeseed sown in the EC, but there is still some discussion over implementation of the glucosinolate standard. Current EC regulations require that a crop must test below 35 micromoles of glucosinolate content per gram of air dried seed in order to qualify for the support price premium (2.50 ECU/100 kg) given to double-low varieties. During negotiations on the current EC pricing package, the new standard of 20 micromoles was postponed until the 1991/92 marketing year due to the unavailability of winter varieties which can consistently meet the standard. A problem that presently confronts farmers is that many seeds fall to the ground during harvest and lie dormant in the soil, with the ability to germinate for up to 10 years. Over time, the older single-low, high erucic acid variety seeds invade fields grown with the "00" varieties, resulting in higher average glucosinolate counts.

In addition, the EC Commission and Agricultural Council have agreed to postpone the initiation of providing price support for only the double-low varieties until at least 1992/93. The Commission and Agricultural Council made clear their intention to maintain aid for varieties containing erucic acid for industrial use. France became the last of the major EC producers to switch almost exclusively to the double-low varieties by planting an estimated 95 percent of the 1990/91 winter rapeseed area to those varieties, up from 65 percent in 1989/90 and 19 percent in 1988/89. But throughout the EC, producers believe that the demand for the industrial quality rapeseed will represent a small and important market. The desire of many producers is that industrial rapeseeds be allowed to continue on the price support dole, but production not count against the rapeseed MGQ support price adjustment.

The guarantee threshold (MGQ) for EC-10 rapeseed (excluding Spain and Portugal) is set at 4.5 million tons for 1990/91. This year's crop is nearly 29 percent above the MGQ and will trigger an automatic price support reduction to approximately 385.5 ECUs per ton or 14 percent below the maximum target price of 449.2 ECUs per ton.

Sunflowerseed: EC sunflowerseed production is estimated at a record 4.3 million tons, up 0.8 million or about 25 percent from last year. Sunflowerseed accounts for 34 percent of total EC oilseed production. Production has increased over 50 percent since 1985/86. Although Spain accounts for 45 percent of total sunflower area, the arid climate results in average yields typically half of those in France. Thus, France, with nearly as much sunflower area as Spain, is projected to harvest almost twice as many sunflowerseeds.

While Spain's climate is normally arid, persistent extraordinary dry conditions during the last 2 years has prompted producers to plant more drought resistant crops, such as sunflowers, in lieu of grains. Hence, Spain's sunflower acreage climbed to the second highest on record to over 1.1 million hectares from 965,000 hectares last year. Production is expected to reach a record 1.3 million tons in 1990. Spain and Portugal are subject to a separate MGQ of 1.4 million tons which is not expected to be challenged in the near future.

France has also experienced drought, particularly in the southern half of the country, causing farmers to substitute area marked for corn into sunflowerseeds. After 2 consecutive years of decline, sunflower acreage expanded 38 percent over last year to a record 1.1 million hectares. This year's expected record sunflowerseed harvest, pegged at 2.5 million tons, will be only marginally above the old record set in 1987, however, due to below average yields.

With the 1990/91 EC-10 guarantee threshold (MGQ) set at 2.0 million tons, France alone will be responsible for a support price reduction of over 12 percent. Adding the additional 465,000 tons produced by the other members of the Community (excluding Spain and Portugal), results in a total sunflowerseed output nearly 50 percent over the MGQ--and a combined automatic support price reduction of an estimated 24.9 percent to 441.3 ECUs per ton from the maximum target price of 582.5 ECUs--and down 20 percent from last years adjusted price of 544.8 ECUs.

Soybeans: EC soybean production is estimated to be a record 2.0 million tons, up slightly from last year. Soybean production has increased nearly 6 fold since 1985 and now accounts for 16 percent of the total EC oilseed output. Italy produces 83 percent of the soybeans for the EC, followed by France at 14 percent.

Soybean production was not introduced to Italy until 1981. Since then production has climbed steadily as farmers, particularly in the fertile Po Valley region of northern Italy, found the bean highly profitable under the EC support price regime. Soybean output in Italy now accounts for nearly 80 percent of Italy's total oilseed production. Due to expanded plantings in northern Italy, which were prompted by the continuation of depressed corn prices, this year's production is expected to weigh in at slightly under 1.7 million tons, a new record.

France is the only other significant soybean producer and is expected to produce 278,000 tons, down 4 percent from last year's record crop. Persistent drought for almost 2 years has encouraged farmers to switch from irrigated soybean production to more drought-resistant crops, such as sunflowerseed.

For 1990/91, the soybean guarantee threshold (MGQ) for the EC-10 is set at 1.3 million tons. With estimated total soybean output at slightly over 1.9 million tons (excluding Spain and Portugal), the MGQ adjusted support price is expected to be 25 percent below the guide price of 557.7 ECUs per ton to 418.5 ECUs - and 7 percent below last year's support price.

CAP Production Policy 1/

Under article 39 of the Treaty of Rome, the basic aims of the Common Agricultural Policy are to increase agricultural productivity, support farmer income, stabilize agricultural markets, and ensure a regular supply of reasonably priced food to EC consumers. As agricultural expenditures have increased, however, budgetary controls became a major concern for several EC members, which is reflected in the changes made in price support policy such as the establishment of guarantee thresholds for grains and oilseeds.

The major price support tool for EC oilseeds is a subsidy paid to crushers or first purchasers, which is passed on to producers through high market prices. There is one basic policy regime which affects rapeseed and sunflowerseed production and another which deals with soybean production. Production policy is identical for the EC-10 countries, and the policy mechanisms in Spain and Portugal are similar to those for the EC-10.

Three basic price levels affect producer returns under the rapeseed and sunflowerseed regime. The most important of these is the target price, which is set annually. The subsidy paid to EC oilseed crushers is equal to the difference between the target price and the EC-calculated world market price. This subsidy allows crushers to purchase EC-produced oilseeds at or near the target price level. Estimated world market prices are set at least once a week and are often posted daily when oilseed prices are moving rapidly. An intervention price, intended to be a price floor, also is announced annually but few oilseeds go into intervention. EC producers generally receive a price somewhere between the target and intervention prices, adjusted for quality and

transportation costs. Both target and intervention prices are subject to monthly increases to account for storage costs and interest charges.

Member states of the EC are required to purchase oilseeds offered into intervention during a specified time period. In the northern countries, the intervention period is from November 1 to May 31, and in Italy, Greece, Spain, and Portugal, the intervention period is between August 1 to April 30. Intervention purchases of rapeseed are limited to seeds which are low in erucic acid (less than 5 percent) and a premium of 25 ECU per ton is available for seed low in both erucic acid and glucosinolates (double-low varieties).

Soybean prices are covered by a separate price regime. Guide prices are set on the same basis as target prices for the other oilseeds, and a subsidy equivalent to the difference between guide price and EC calculated world market price is paid to the first purchaser of EC soybeans. There is no intervention mechanism for soybeans, but purchasers must document that they have paid producers at or above a set minimum price in order to claim the subsidy. Announced guide and minimum prices are based on a standard quality.

Support prices for the major oilseeds are affected by guarantee thresholds. When production exceeds the threshold for a given commodity, prices are reduced in the current marketing year by a portion of the percentage by which production exceeds the threshold. Guarantee thresholds are set for the EC-10 as a whole, and for Spain and Portugal individually. For 1990/91, target and intervention prices will be reduced by 0.5 percent for each 1.0 percent of rapeseed and sunflowerseed in the EC-10. The present regime for agricultural prices supports is scheduled to expire as of December 31, 1990. No new proposals for the restructuring of these support mechanisms have surfaced, but changes in the present support scheme is expected to continued some form of income protection.

Announced oilseed support levels (in ECU) have remained stable since 1987/88, but implementation of the guarantee thresholds has had a variable effect on the prices received. In addition, the use of "green rates" distorts the actual value of agricultural support. Green rates are artificial exchange rates used for determining the local support prices which correspond to the Community-wide support prices announced on an ECU basis. Below, the table illustrates the percent difference between green rates and exchange rates. For example, the target price for rapeseed in France set during this year's pricing package negotiation would be 10 percent below the actual local target price in France.

Timothy Rocke (202) 382-9172 Rodney Paschal (202) 382-8881

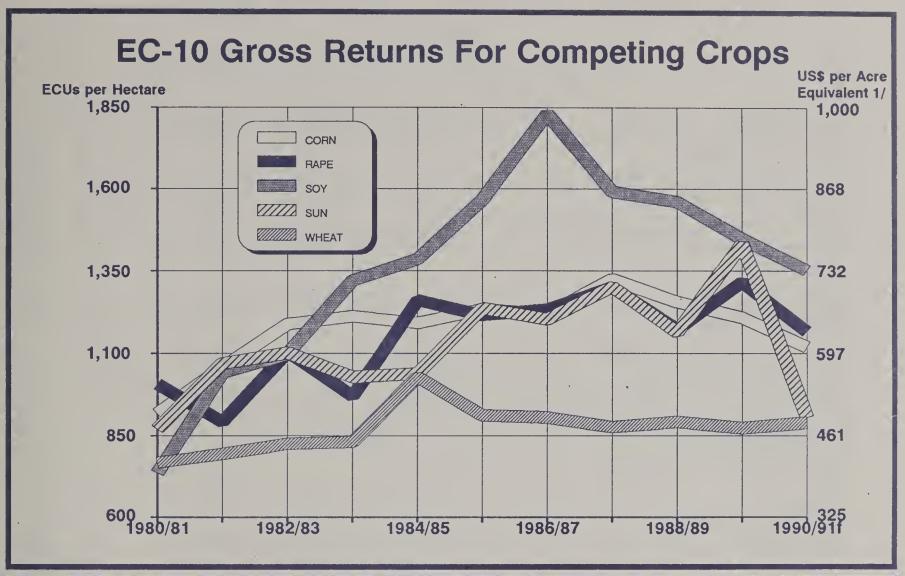
TABLE 16

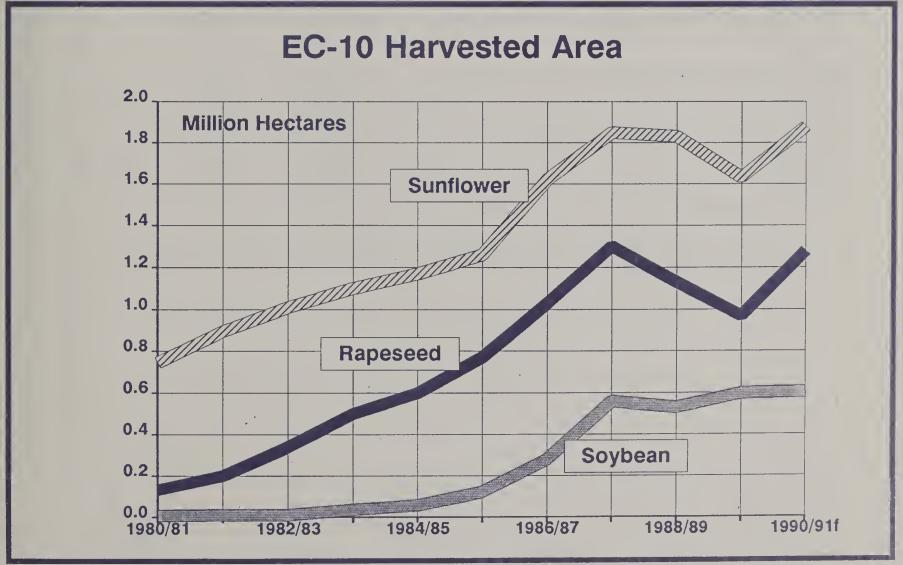
EC-12 GREEN RATES VERSUS EXCHANGE RATES

(Local Currency per ECU)

	Green	Rates	-Exchange- Rate 1/	Percent Difference
	1989/90	1990/91	8/21/90	
Bel./Lux	48.287	48.287	42.529	11
Denmark	8.930	8.930	7.897	12.
France	7.698	7.698	6.937	10
Greece	179.387	191.975	203.859	6
Ireland	0.857	0.857	0.770	9
Italy	1,673.000	1,700.000	1,520.190	11
Netherlands	2.638	2.638	2.238	12
Portugal	192.002	199.761	N/A	N/A
Spain	152.896	152.896	126.892	17
United Kingdom	0.701	0.701	0.696	1
West Germany	2.361	2.361	2.067	12

 $[\]frac{1}{8}$ Exchange rates are based on spot rates as quoted in the Financial Times $\frac{8}{19}$.





1/ Conversion rates are 1.34 ECU per U.S. dollar and 2.471044 acres per hectare.

September 1990

Production Estimates & Crop Assessment Division, FAS, USDA

TABLE 17
EC OILSEED PRICE REGIMES

EC RAPESEEED Area Harvested ('000 Ha.) Production (MMT) Guarantee Threshold (MMT) Target Price (ECU/Ton) Adjusted Target Price (ECU/Ton)1/ Monthly Increment (ECU/Ton)	1987/88 1.9 5.9 3.5 450.2 405.2 3.97	415.8	· · · · · · ·	
EC SOYBEANS				
Area Harvested ('000 Ha.)	0.6 1.8	0.5 1.7	0.6 1.9	0.6
Production (MMT) Guarantee Threshold (MMT)	1.1	1.7	1.3	1.3
Guide Price (ECU/Ton)	558.5			
Adjusted Target Price (ECU/Ton)1/	502.7	500.7	451.3	418.5
EC SUNFLOWERSEED Area Harvested ('000 Ha.)				
EC-10	1.3	1.2	1.0	1.4
Spain	1.0	0.9	1.0	1.1
Production (MMT)				
EC-10	3.1	2.6	2.3	3.0
Spain Guarantee Threshold (MMT)	1.0	0.9	1.1	1.3
EC-10	1.7	2.0	2.0	2.0
Spain	1.2	1.4	1.4	1.4
Target Price (ECU/Ton)				
EC-10	583.5	583.5	583.5	582.5
Spain	445.5	462.8	480.0	497.1
Adjusted Target Price (ECU/Ton)1/	E0E	/ (0 0	5// 0	//1 2
EC-10 Spain	525.5 445.5	468.0 462.8	544.8 480.0	441.3 497.1
Monthly Increment (ECU/Ton)	4.7	3.8	3.3	3.3

^{1/} Adjusted target prices are calculated using USDA 1990/91 September production estimates.

Table 18.

1/ Includes cottonseed, flaxseed, and peanuts.

September 1990

Production Estimates & Crop Assessment Division, FAS, USDA

September 1990

	1974/75	1975/76	1976/77	1977778	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1968/89	1989/90	1890/91
Rapeseed																	
AREA HARVESTED: Baloium-1 uxambourd	-	-	0	-	^	^	~	-	rt.	4	rc.	^	ď	rc.	4	ιc	ĸ
Denmark	48	72	4	· &	47	. 8	103	132	152	162	191	217	227	250	199	231	250
France Germany Endors! Benublic of	318	261 90	282 95	275	253	223	400	689	476	463	430	461 268	388	740	869	613	680
Ireland	-	80	60	20	171	0	<u> </u>	5 2	ရှိ က -	4	4	3 4	7	420	8 4	424	2,0
Italy	-	-	_	-	-	-	-	-	0	-	2	9	23	28	23	17	13
Netherlands	14	14	12	Ξ.	0,	٧ ،	ω α	= 5	= 9	13	13	9 0	80 (9	~	8	7
Spain Thited Kingdom	 0 2	၁ ဇွ	ν α	4 ñ	4 2	8 Z	æ 6	25 125	19	16	10 280	3 0 ca	300	8 8	340 0	10	12
Total =	517	478	\$ 1 \$	∯ 16	SI S	507	य इ। इर	829	1,029	1,117	1,178	1,271	1,270	1,881	1,840	1,638	1,83
PRODUCTION:																	
Belgium-Luxembourg	-	2	0	-	2	2	2	-	10	10	Ŧ.	9	0	15	13	15	15
Denmark	112	131	81	77	180	150	225	280	335	8	474	244	618	558	504	652	750
Germany, Federal Republic of	88	4/4	222	282	8 8	321	377	8 8	535	200	- - - - - - - - - - - - - - - - - - -	-, 803	098	2,045	2,302	1,763	1,870
pu	0	0	0	0	-	0	-	2	2	6	6	8	16	6	6	6	10
Italy	m ;	က၂	2	- 9	2 5	2	2 5	2 !	0	- 9	2	13	4	88	51	9 (25
Spain	45	37	ઝ 장	8 ^	23	~ ←	\$ =	37	33	æ ∓	8 =	31	2 5	31	24	23	25
United Kingdom	 - \footnote{\chi_0}	. Tel	=======================================	142	155	198	- 00 00 00 00 00 00 00 00 00 00 00 00 00	325	280	265	925	895	2 26	1,353	1,040	953	1,200
Total =	1,174	200	066	928	1,180	1,211	. 2,050	2,024	2,659	2,448	3,439	3,648	3,696	5,952	5,170	4,922	5,812
Sovbeans																	
AREA HARVESTED:	*	C	•	0	*	17	o	o	O	2	00	00	40	70	S	126	404
Germany, Federal Republic of	- 0	0 0	- 0	0	0	0	0	00	00	0	70	07	90	0	0 0	3 ~	22
Стевсе	0	0	0	0	0	0	0	0	0	0	0	0	-	2	က	0	7
Italy	0 0	0 0	0 0	0 0	00	0 0	0 0	m c	m c	25	8	<u>g</u> c	232	481	432	453	470
Spain	25	ο α	0 4	0 4	o 0	0	2	0 4	o m	- 0	0 0	> N	· -	0 0	> ~	7	15
Total =	18	10	l ro	1 ~	इ	1 %	1 5	1 9	15	' ස	8	124	282	584	534	18	820
PRODUCTION																	
France	4	2	2	4	4	16	14	18	16	25	31	46	85	186	228	280	278
Germany, Federal Republic of	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Greece	0	0	0	0	0	0	0	0	0	0	0	0	8	4	8	28	18
Italy	0	0	0 0	0 0	0 0	0 0	0 0	a	O	8	110	286	808	1,589	1,408	1,800	1,650
Portugal	> g	> :	D Q	> c	οţ	<u>ب</u> 5 ٿا	>	0 0	5 L	0	o •	0 1	0 0	5 •	၁ င္	010	_ 0
	315	<u> </u>	010	ΣIÇ	-1 3	의 3	<u> </u>	<u>ه</u> اه	ဂ၊ ဗွ	NI (41	AI I	21 8	41	21	λl .	સે ફિ
lotal =	43	18	20	21	21	31	28	3	8	88	145	33/	896	1,783	1,655	1,948	1,989
																	7

USSR/KAZAKHSTAN SPRING WHEAT SITUATION

The current season has been an interesting one for spring wheat production in the Soviet republic of Kazakhstan. Expectations were high early this year for spring wheat production in Kazakhstan with soil moisture levels above normal at planting time due to more abundant winter precipitation. The weather turned drier in May and June, delaying crop development and causing concern for many farmers in northern Kazakhstan. Abundant July rainfall relieved their worries, and farmers and officials in Kazakhstan are now looking forward to an excellent spring grain harvest. USDA Foreign Agriculture Service personnel traveled through northern Kazakhstan between August 15 and August 25, visiting farms and meeting with government agricultural officials in Kustanay, Kokchetav, and Tselinograd oblasts, and in the republic capital of Alma-Ata.

ASSESSMENT OF CROP CONDITIONS

FUEL

Oblast and republic officials seemed confident that fuel shortages will not pose a threat to harvest operations. Officials believe that, because of the Tyumen pipeline, Kazakhstan is fairly well protected from the fuel distribution problems that plague the Ukraine.

Conditions of wheat and barley fields on the sovkhozes (state farms) toured were good-to-excellent. The high plant density of the stands indicated that soil moisture at the time of planting and germination (late May - early June) was adequate, and conditions were favorable for tillering, despite generally low precipitation in northern Kazakhstan during May and June. Sovkhoz directors and agronomists were universally optimistic about this year's harvest. Harvesting of some barley fields had begun. Most wheat fields were in the soft dough stage, with about 10 days remaining (from the time of the tour) until the beginning of wheat harvest. Rains in July stimulated weed growth in some fields, but weeds were generally not a problem. Based on preliminary harvest results, republic agricultural officials in Alma-Ata are estimating total Kazakhstan grain production at 30 million tons: not a record, but a good harvest.

Total Grain Area, Yield, and Production in Kazakhstan. [Source: Narodnoe Khozyaistvo USSR 1988 (National Economy of the USSR for 1988), published by GOSKOMSTAT.]

	Area	Yield	Production
	MHa	Centers/Ha	MMT
1971–75	24.1	9.0	$\overline{21.7}$
1976–80	25.5	10.8	27.5
1981–85	25.4	8.4	21.3
1986	24.6	11.5	28.3
1987	24.5	11.2	27.4
1988	24.3	9.3	22.6
1989 (Prel.)	N/A	N/A	20.5

TRANSPORT AND EQUIPMENT

Officials expressed concern but not alarm regarding the movement of grain from farms to district elevators, saying that transport is not currently a problem and that trucks can be requisitioned from other regions. Some farms are prepared to avoid having to rely on district equipment directors by using wagons and tractors to deliver their grain to the elevators.

Availability of equipment could be further complicated by the results of the delayed development of the wheat crop caused by dry weather in June. Grain and forages will require simultaneously harvest this year, and, according to one producer only 20-25 days will be available this year (compared to 40-45 days in a normal year) to harvest the wheat.

GRAIN STORAGE

Grain storage capacity on the farms is generally limited to feed and seed storage. A fairly typical example is Podlesni sovkhoz in Tselinograd oblast which produces an average of 25-30,000 tons of grain and has on-farm storage capacity of 10,000 tons: 6,000 for feed, 3,000 for seed, and 1,000 for other uses.

Officials responded to questions about rayon-level grain storage by stating that storage of this year's anticipated good harvest should not be a problem. More likely problems will be long lines of trucks waiting to unload their grain at district elevators and related logistical problems involving the unloading of the trucks.

LEASING

The question of leasing was discussed with Tselinograd oblast agricultural officials. They emphasized that leasing in the USSR is unlike leasing elsewhere in the world. The lease-holder must operate within the framework of the collective system. There is generally only one "customer" for the lease-holder's grain: the district grain receiving depot. Furthermore, the lease-holder does not deal directly with the purchaser of his products; the director of the sovkhoz is the middleman, and he can exert his influence (or pressure) on lease-holders' decisions. Lease-holders still do not have the financial independence to obtain necessary inputs: seed, equipment, and fertilizer. They must rely on district officials and farm directors for inputs. Distribution of land is difficult, since there is presently no value (in terms of price) attached to the land. The director of the sovkhoz on which the lease-holder operates determines how the land is distributed. director's decisions are theoretically influenced by the local soviet, but the chairman of the local soviet is frequently the director of the sovkhoz. Officials also suggested that the vast agricultural territory of northern Kazakhstan poses additional logistical problems for lease-holders. Despite the long list of problems cited by the officials, however, they also said that this is a learning process and that new economic relations are being built, suggesting that leasing will continue to play a role in Kazakhstan agriculture.

Mark Lindeman (202) 475-5143

ASIAN TROPICAL TIMBER PRODUCTION

MALAYSIA: Malaysia is the leading commercial producer of tropical timber in Asia. Its total forest area is nearly 19.9 million hectares, of which approximately 9.3 million hectares are located in Sarawak, 6.2 million hectares in Peninsular Malaysia, and 4.3 million hectares in Sabah. Of the total forest area, 7.2 million hectares have been classified as "Stateland Forests" which can be logged, converted to agricultural land, or used for any type of commercial activity. The remaining area--12.7 million hectares--has been designated as "Permanent Forest Estate" (PFE). Within the PFE classification, three different categories of forest area have been designated. The first two categories, "Protective Forests" and "Amenity Forests" are areas in which no logging is permitted. "Protective Forests" are preserved because of their strategic importance as environmental barriers. They are maintained to ensure adequate water supplies and provide flood control. "Amenity Forests" are those areas reserved for recreational and educational/research activities. The last and largest category is "Productive Forests". About 9.0 million hectares of the PFE have been classified as "Productive Forests" in which there are defined policies regarding forest management, and logging activities are carried out on a sustainable yield basis.

Malaysia's forests encompass a wide range of types including Mangrove, Beach Strand, Heath, Peat Swamps, Lowland Dipterocarp, Hill Dipterocarp, Upper Hill Dipterocarp, and Montane. The Dipterocarp forests represent about 85 percent of the total forested area and are dominated by the family Dipterocarpaceae within which are many species of the genera Anisoptera, Dipterocarpus, Dryobalanops, Hopea, and Shorea. Specific species of commercial importance are the meranti, kapur, keruing, and serungan from the lowland and hill dipterocarp forests. Rubberwood is becoming more popular both domestically and in foreign markets, and is expected to eventually account for an increasingly larger portion of Malaysia's species mix.

Yields in Sabah and Sarawak (East Malaysia), at 40-50 cubic meters (CUM) per hectare, tend to be higher than those in Peninsular Malaysia. East Malaysia also has a better mix of the more desirable species. Yields in Peninsular Malaysia are roughly 30-40 CUM per hectare. Selective harvesting and under-utilization of minor species limit overall yields. With the supply of commercial species dwindling, loggers are beginning to fell smaller diameter, less well-known trees. However, these traditionally non-commercial species command lower prices due to the inconsistency of supply and limited information on end-use applications.

In recent years, Malaysia has been criticized for uncontrolled logging of its tropical rain forests. Since independence in 1957, the Government's economic development policy has given priority to agriculture and mining in the allocation of land. Over the years, large tracts of lowland forest have been cut to make way for agricultural and commercial development.

Publicly financed resettlement schemes for rubber and oil palm smallholders have absorbed 1 million hectares within the last decade. Additionally, the private sector has clear-cut thousands of hectares of commercial timber land replanting it with oil palm, rubber, and cocoa trees. In an effort to stem the criticism and rebuild forest reserves, commercial forest estates have recently been established and planted with the fast growing species- akasia, yemane, and batai.

Malaysia's 1990 harvest of tropical hardwood logs is expected to increase by 1.0 million CUM, to a record 42.0 million CUM. In response to strong domestic and overseas demand, as well as Government efforts to expand downstream processing, production of lumber and panel products is expected to exceed the 1989 level.

MALAYSIA: FORESTRY PRODUCTION (1,000 Cubic Meters)

	1988	1989	<u>1990</u> <u>1</u> /
Tropical Hardwood Logs	38,969	41,000	42,000
Tropical Hardwood Lumber	6,559	8,183	8,400
Tropical Hardwood Plywood	992	1,090	1,130
Tropical Hardwood Veneer	383	445	480
Medium Density Fiberboard	0	0	20
Particleboard	80	95	110

^{1/} Preliminary.

MALAYSIA: FOREST AREA BY REGION

YEAR	PEN. MALAYSIA	SABAH	SARAWAK	TOTAL
	(1,000 hectares)		
1980	6,505	5 ⁻ ,357	9,540	21,402
1981	6,438	5,357	9,441	21,236
1982	6,378	4,500	9,441	20,319
1983	6,373	4,665	9.430	20,468
1984	6,353	4,665	9,523	20,541
1985	6,353	4,510	9,438	20,301
1986	6,455	4,600	9,438	20,493
1987	6,400	4,400	9,400	20,200
1988	6,300	4,340	9,370	20,010
1989	6,200	4,310	9,340	19,850

MALAYSIA: AREA LOGGED BY REGION

YEAR	PEN. MALAYSIA	SABAH	SARAWAK	TOTAL
	(1,000 hectares)		
1970	60	55	60	175
1971	317	220	50	587
1972	424	222	50	696
1973	433	370	50	853
1974	353	318	50	721
1975	303	371	40	714
1976	411	203	.70	684
1977	362	241	80	683
1978	340	321	100	761
1979	257	217	130	604
1980	222	157	140	519
1981	248	117	150	515
1982	216	162	160	538
1983	194	157	170	521
1984	240	184	304	728
1985	217	159	284	660
1986	248	175	293	716
1987	204	215	310	729
1988	257	195	360	812
1989	265	170	400	835

September 1990

Production Estimates and Crop Assessment Division

MALAYSIA: LOG OUTPUT BY REGION

YEAR	PEN. M'SIA	%	SABAH	%	SARAWAK	%	MALAYSIA
			(1,000 Cu	bic Mete	rs)		
1960	2,248	40.5	2,141	38.5	1,167	21.0	5,556
1961	2,219	36.9	2,605	43.3	1,197	19.9	6,021
1962	2,309	35.9	2,781	43.3	1,337	20.8	6,427
1963	2,697	34.4	3,445	43.9	1,704	21.7	7,846
1964	2,979	35.5	3,561	42.5	1,841	22.0	8,381
1965	3,223	33.3	4,142	42.8	2,311	23.9	9,676
1966	3,808	30.9	5,528	44.9	2,983	24.2	12,319
1967	4,197	31.1	5,687	42.1	3,622	26.8	13,506
1968	5,076	33.4	5,886	38.7	4,228	27.8	15,190
1969	5,336	33.7	6,174	39.0	4,324	27.3	15,834
1970	6,542	36.8	6,561	36.9	4,689	26.4	17,792
1971	7,150	39.2	6,953	38.1	4,127	22.6	18,230
1972	8,920	43.3	8,527	41.4	3,171	15.4	20,618
1973	9,691	40.3	11,104	46.1	3,269	13.6	24,064
1974	8,623	40.3	9,922	46.4	2,827	13.2	21,372
1975	7,533	39.3	9,120	47.6	2,511	13.1	19,164
19.76	9,594	36.1	12,589	47.3	4,412	16.6	26,595
1977	9,711	35.2	12,979	47.1	4,883	17.7	27,573
1978	9,412	32.8	13,291	46.3	5,982	20.9	28,685
1979	10,402	36.2	10,842	37.7	7,518	26.1	28,762
1980	10,453	37.4	9,064	32.5	8,399	30.1	27,916
1981	10,226	33.4	11,732	38.3	8,697	28.4	30,655
1982	9,842	30.1	11,639	35.6	11,243	34.4	32,724
1983	10,238	31.2	11,991	36.6	10,565	32.2	32,794
1984	9,182	29.5	10,504	33.8	11,401	36.7	31,087
1985	7,914	27.6	8,442	29.5	12,285	42.9	28,641
1986	8,587	28.8	9,810	32.8	11,471	38.4	29,868
1987	10,320	28.5	12,174	33.7	13,655	37.8	36,149
1988	13,601	34.9	10,981	28.2	14,387	36.9	38,969
1989	13,200	32.2	9,600	23.4	18,200	44.4	41,000

September 1990 Production Estimates and Crop Assessment Division

MALAYSIA: SAWNWOOD OUTPUT BY REGION 1/

PEN. M'SI	A %	SABAH 2	2/ %	SARAWAK 2/	%	MALAYSIA
		(1,000 (Cubic Mete	ers)		
1 020	00 7	1.6	1 2			1 0/2
* · · · · · · · · · · · · · · · · · · ·				_	_	1,043
•				_		1,047
•				_	_	1,082
•				_	-	1,258
					_	1,342
				_	_	1,364
				_	_	1,452 1,760
				_	_	
				_	_	2,036 2,069
* · · · · · · · · · · · · · · · · · · ·				_	- LI - II	*
				-	_	2,355 2,740
				ar and make an	_	3,499
•				-	-	3,987
•				_		3,916
•					11-12-11-11	3,725
· ·				_		5,150
				_		5,659
•				_	_	5,908
•						5,835
•				357	5.7	6,238
*						5,564
						6,295
						7,145
		·				5,799
						5,455
· ·		· ·				5,224
						5,890
						6,617
6,570	79.8	1,200	14.6	460	5.6	8,230
	1,029 1,005 1,068 1,245 1,323 1,339 1,421 1,725 2,006 2,039 2,326 2,465 3,134 3,587 3,523 3,352 4,634 5,091 5,358 5,270 5,358 5,270 5,339 4,564 5,023 5,676 4,608 4,047 4,073 4,530 5,155	1,029 98.7 1,005 96.0 1,068 98.7 1,245 99.0 1,323 98.6 1,339 98.2 1,421 97.9 1,725 98.0 2,006 98.5 2,039 98.6 2,326 98.8 2,465 90.0 3,134 89.6 3,587 90.0 3,523 90.0 3,523 90.0 3,523 90.0 3,523 90.0 4,634 90.0 5,091 90.0 5,358 90.7 5,270 90.3 5,358 90.7 5,270 90.3 5,339 85.6 4,564 82.0 5,023 79.8 5,676 79.4 4,608 79.5 4,047 74.2 4,073 78.0 4,530 76.9 5,155 77.9	1,029 98.7 14 1,005 96.0 42 1,068 98.7 14 1,245 99.0 13 1,323 98.6 19 1,339 98.2 25 1,421 97.9 31 1,725 98.0 35 2,006 98.5 30 2,039 98.6 30 2,326 98.8 29 2,465 90.0 275 3,134 89.6 365 3,587 90.0 400 3,523 90.0 393 3,352 90.0 393 3,352 90.0 393 3,352 90.0 373 4,634 90.0 516 5,091 90.0 568 5,358 90.7 550 5,270 90.3 565 5,339 85.6 542 4,564 82.0 676 5,023 79.8 897 5,676 79.4 1,107 4,608 79.5 894 4,047 74.2 1,133 4,073 78.0 811 4,530 76.9 966 5,155 77.9 1,067	1,029 98.7 14 1.3 1,005 96.0 42 4.0 1,068 98.7 14 1.3 1,245 99.0 13 1.0 1,323 98.6 19 1.4 1,339 98.2 25 1.8 1,421 97.9 31 2.1 1,725 98.0 35 2.0 2,006 98.5 30 1.5 2,039 98.6 30 1.4 2,326 98.8 29 1.2 2,465 90.0 275 10.0 3,134 89.6 365 10.4 3,587 90.0 400 10.0 3,523 90.0 393 10.0 3,523 90.0 393 10.0 3,352 90.0 373 10.0 4,634 90.0 516 10.0 5,091 90.0 568 10.0 5,358 90.7 550 9.3 5,270 90.3 565 9.7 5,339 85.6 542 8.7 4,564 82.0 676 12.2 5,023 79.8 897 14.2 5,676 79.4 1,107 15.5 4,608 79.5 894 15.4 4,047 74.2 1,133 20.8 4,073 78.0 811 15.5 4,530 76.9 966 16.4 5,155 77.9 1,067 16.1	(1,000 Cubic Meters) 1,029 98.7 14 1.3 - 1,068 98.7 14 1.3 - 1,245 99.0 13 1.0 - 1,323 98.6 19 1.4 - 1,339 98.2 25 1.8 - 1,421 97.9 31 2.1 - 1,725 98.0 35 2.0 - 2,006 98.5 30 1.5 - 2,039 98.6 30 1.4 - 2,326 98.8 29 1.2 - 2,465 90.0 275 10.0 - 3,134 89.6 365 10.4 - 3,587 90.0 400 10.0 - 3,523 90.0 393 10.0 - 3,523 90.0 393 10.0 - 3,523 90.0 393 10.0 - 3,523 90.0 373 10.0 - 4,634 90.0 516 10.0 - 5,091 90.0 568 10.0 - 5,358 90.7 550 9.3 - 5,270 90.3 565 9.7 - 5,339 85.6 542 8.7 357 4,564 82.0 676 12.2 324 5,023 79.8 897 14.2 375 5,676 79.4 1,107 15.5 362 4,608 79.5 894 15.4 297 4,047 74.2 1,133 20.8 275 4,073 78.0 811 15.5 340 4,530 76.9 966 16.4 394 5,155 77.9 1,067 16.1	(1,000 Cubic Meters) 1,029 98.7 14 1.3 1,005 96.0 42 4.0 1,068 98.7 14 1.3 1,245 99.0 13 1.0 1,323 98.6 19 1.4 1,339 98.2 25 1.8 1,421 97.9 31 2.1 1,725 98.0 35 2.0 2,006 98.5 30 1.5 2,039 98.6 30 1.4 2,326 98.8 29 1.2 2,465 90.0 275 10.0 3,134 89.6 365 10.4 3,587 90.0 400 10.0 3,523 90.0 373 10.0 3,523 90.0 373 10.0 3,523 90.0 373 10.0 5,091 90.0 568 10.0 5,091 90.0 568 10.0 5,358 90.7 550 9.3 5,270 90.3 565 9.7 5,339 85.6 542 8.7 357 5.7 4,564 82.0 676 12.2 324 5.8 5,023 79.8 897 14.2 375 6.0 5,676 79.4 1,107 15.5 362 5.1 4,608 79.5 894 15.4 297 5.1 4,047 74.2 1,133 20.8 275 5.0 4,073 78.0 811 15.5 340 6.5 4,530 76.9 966 16.4 394 6.7 5,155 77.9 1,067 16.1

^{1/} Includes lumber and railroad ties/sleepers.

September 1990

Production Estimates and Crop Assessment Division

^{2/} Prior to 1980, Sarawak lumber production included under Sabah.

INDONESIA: Indonesia's forest products industry is a large and vital part of the local economy, providing an estimated 500,000 jobs annually and much needed foreign exchange. However, the preservation and management of the industry's remaining forest resources has become a pressing domestic and international issue. There are approximately 143 million hectares of tropical rain forest in Indonesia. Of this amount, 65 million hectares are classified as logging areas, about 30 million hectares are designated for conversion to agricultural production, and another 30 million hectares are "protected" from exploitation. Although nearly one-half of the designated logging area remains virgin forest, the deforestation rate is estimated at 1 million hectares annually. To date, reforestation has been minimal and most areas have been clear cut or selectively cut in a manner that inhibits regeneration. The industry is now looking to virgin stands in Irian Jaya and other islands in Eastern Indonesia as a source for future supplies of logs.

Output of tropical hardwood logs is trending downward due to stricter enforcement of the annual cutting limit (32 million CUM during 1990), difficult access to virgin stands, and an increase in the timber reforestation tax. Log production for 1990 is forecast at 27.0 million CUM, down 1.0 million CUM from a year ago.

Lumber production is projected to decline to 9.0 million CUM during 1990 due to a substantial increase in the sawn timber export tax. The Government's purpose for raising the tax is to foster growth in downstream wood processing industries. However, the immediate impact of the tax is anticipated to be a decline in both production and exports of sawn timber. Indonesia's downstream industries do not as yet have the capacity to absorb all, or even most of the potential domestic supply.

Indonesia's hardwood plywood sector has rapidly expanded over the last decade. Total production capacity has increased from 1.0 million CUM in 1980 to an estimated 9.6 million CUM in 1990. Actual production for 1990 is forecast at a record 8.9 million CUM, slightly above the volume produced last year. Indonesian plywood, made from teak, mahogany, and other prized tropical hardwoods, is generally of high quality.

Particleboard production is forecast at 350,000 CUM, 17 percent above the 1989 level. The manufacture of particleboard is relatively new in Indonesia, begun as a means to utilize the waste products from the plywood and sawmill industries. Seven mills produce low-density particleboard, mainly from rubber wood or mill waste. Current annual production capacity is approximately 435,000 CUM, but a new mill is expected to be fully operational by early 1991.

	INDONESIA:	FORESTRY F	RODUCTION	
	(1,000	Cubic Mete	ers)	
		1988	1989	1990 1/
Tropical Hardwood	Logs	26,400	28,000	27,000
Tropical Hardwood	Lumber	10,274	10,371	9,000
Tropical Hardwood	Veneer	50	31	44
Tropical Hardwood	Plywood	7,733	8,784	8,900
Particleboard		300	300	350

^{1/} Preliminary.

THE PHILIPPINES: Traditionally, the Philippines has been a major producer of premium hardwood logs, lumber, plywood, and other processed wood products. However, decades of unchecked exploitation have caused severe damage to the country's forest resources and impelled the Government to impose logging moratoriums, and ban log and lumber exports.

Forest resources in the Philippines are in a critical state. Out of a previous high of 15.0 million hectares, only about 6.4 million hectares of actual forest cover remain, of which only 5.0 million hectares are commercial forests. An average of 119,000 hectares of forest land are denuded each year. However, reforestation efforts are proving successful. A record 124,000 hectares were reforested during 1989, 24 percent more than the Government target of 100,000 hectares.

Tropical hardwood log production is forecast at approximately 2.6 million CUM, down 17 percent from 1989, due to a reduction in the annual allowable cut, and a moratorium on logging in areas designated by the Government as over-harvested. Logging operations are presently allowed in only 12 provinces and only in forests with less than a 50 percent slope. The cutting of premium hardwood species such as narra, almaciga, and molave, as well as the cutting of saplings for agricultural or industrial use, is severely restricted. Beginning with the 1990 harvest, the Government has ordered loggers to reforest all acreage cut at a 1:1 ratio.

Philippine lumber production is declining primarily because of diminishing forest reserves and the current logging restrictions. These factors have forced the closure of 236 sawmills since 1987, 191 of which were closed during 1989. As a result, 1990 production of tropical hardwood lumber is expected to plunge 18 percent to 2.5 million CUM.

During 1990, the veneer and plywood industries are expected to fare somewhat better than the sawmilling sector. These industries tend to encounter fewer log supply problems since most integrated plywood/veneer plants have their own logging concessions or have negotiated long-term supply contracts for raw material. Production of plywood and veneer is forecast at 400,000 and 90,000 CUM, respectively, substantially above the volumes produced a year ago.

Over the next decade, the Philippine Government and private foresters intend to pump almost U.S.\$655 million into the forestry sector to build new processing facilities and rehabilitate and/or modernize existing plants and equipment. Of this investment, U.S.\$238 million is targeted for the logging industry, mainly for the purchase of harvesting equipment. The sawmilling industry has been allotted about U.S.\$152 million, the wood-based panel industry U.S.\$134 million, and nearly U.S.\$130 million has been set aside for the secondary (molding, doors, flooring) and tertiary (finished wood products) industries. The objective of the modernization program is to increase production and improve efficiency in the various sectors by replacing or rehabilitating existing sawmills and plywood/veneer plants, as well as building new mills with kiln-drying facilities. Rehabilitation will include the upgrading of conveyance systems, saws, edging and trimming operations, sawdoctor shops, and dust extraction systems. Although these investments are expected to boost production costs in the short-run, the industry expects long-term benefits in the form of higher quality, properly sorted and graded logs for processing, better recovery rates, and higher profits from better-quality, value-added products.

UNITED STATES DEPARTMENT OF AGRICULTURE WASHINGTON, D.C. 20250

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

FIRST-CLASS MAIL
POSTAGE & FEES PAID
USDA-FAS
WASHINGTON, D.C.
PERMIT No. G-262

If your address should be changed PRINT OR TYPE the new address, including ZIP CODE and return the whole sheet and/or envelope to:

FOREIGN AGRICULTURAL SERVICE, Room 4644 So. U.S. Department of Agriculture Washington, D.C. 20250

PHILIPPINES: FORESTRY PRODUCTION (1,000 Cubic Meters)

	1988	1989	1990 1/
Tropical Hardwood Logs	3,800	3,037	2,500
Tropical Hardwood Lumber	1,033	951	850
Tropical Hardwood Veneer	85	75	90
Tropical Hardwood Plywood	415	342	400

1/ Preliminary.